

This document provides pertinent information concerning the reissuance of the VPDES Permit listed below. This permit is being processed as a Minor, Municipal permit. The discharge results from the operation of a 0.0198 MGD wastewater treatment plant. This permit action consists of updating the proposed effluent limits to reflect the current Virginia WQS (effective 6 January 2011) and updating permit language as appropriate. The effluent limitations and special conditions contained in this permit will maintain the Water Quality Standards of 9VAC25-260 et seq.

1. Facility Name and Mailing Address: Woodbridge Mobile Home Park STP
49 SW Flagler Ave., STE 201
Stuart, FL 34994
SIC Code: 4952 WWTP
Facility Location: 13145 Minnieville Road
Woodbridge, VA 22192
County: Prince William
Facility Contact Name: Bradley Dressler
Telephone Number: 772-221-3500
Facility Email Address: 12dressler@gmail.com
2. Permit No.: VA0027855
Expiration Date: 24 January 2012
Other VPDES Permits: Not Applicable
Other Permits: PWSID 6153260 – Public Water Supply (groundwater)
E2/E3/E4 Status: Not Applicable
3. Owner Name: Woodbridge MHP LLC
Owner Contact / Title: Bradley Dressler / President
Telephone Number: 772-221-3500
Owner Email Address: 12dressler@gmail.com
4. Application Complete Date: 23 July 2012
Permit Drafted By: Douglas Frasier
Date Drafted: 5 October 2012
Draft Permit Reviewed By: Alison Thompson
Date Reviewed: 12 October 2012
Public Comment Period: Start Date: 6 December 2012
End Date: 7 January 2013
5. Receiving Waters Information: See **Attachment 1** for the Flow Frequency Determination.
Receiving Stream Name: Marumsc Creek
Stream Code: 1aMAU
Drainage Area at Outfall: < 5 square miles
River Mile: 4.1
Stream Basin: Potomac River
Subbasin: Potomac River
Section: 07
Stream Class: III
Special Standards: b
Waterbody ID: VAN-A25R
7Q10 Low Flow: 0.0 MGD
7Q10 High Flow: 0.0 MGD
1Q10 Low Flow: 0.0 MGD
1Q10 High Flow: 0.0 MGD
30Q10 Low Flow: 0.0 MGD
30Q10 High Flow: 0.0 MGD
Harmonic Mean Flow: 0.0 MGD
30Q5 Flow: 0.0 MGD
6. Statutory or Regulatory Basis for Special Conditions and Effluent Limitations:

<input checked="" type="checkbox"/> State Water Control Law <input checked="" type="checkbox"/> Clean Water Act <input checked="" type="checkbox"/> VPDES Permit Regulation <input checked="" type="checkbox"/> EPA NPDES Regulation	<input type="checkbox"/> EPA Guidelines <input checked="" type="checkbox"/> Water Quality Standards <input type="checkbox"/> Other:
---	---
7. Licensed Operator Requirements: Class III
8. Reliability Class: Class I

9. **Permit Characterization:**

<input checked="" type="checkbox"/> Private	<input checked="" type="checkbox"/> Effluent Limited	<input type="checkbox"/> Possible Interstate Effect
<input type="checkbox"/> Federal	<input checked="" type="checkbox"/> Water Quality Limited	<input type="checkbox"/> Compliance Schedule Required
<input type="checkbox"/> State	<input type="checkbox"/> Toxics Monitoring Program Required	<input type="checkbox"/> Interim Limits in Permit
<input type="checkbox"/> POTW	<input type="checkbox"/> Pretreatment Program Required	<input type="checkbox"/> Interim Limits in Other Document
<input type="checkbox"/> TMDL		

10. **Wastewater Sources and Treatment Description:**

The wastewater source consists of domestic sewage from a mobile home park with 75 units; a population of 225 residents. The wastewater treatment plant is an extended aeration activated sludge package plant. The raw wastewater flows through a manual bar screen, an aeration basin and then a secondary clarifier. The effluent is then aerated and disinfected via ultraviolet light before discharging to the receiving stream.

The facility recently finished replacing all of the collection system within the park to remedy the severe infiltration and inflow issues experienced at the plant.

See **Attachment 2** for a facility schematic/diagram.

TABLE 1 OUTFALL DESCRIPTION				
Number	Discharge Sources	Treatment	Design Flow(s)	Latitude / Longitude
001	Domestic Wastewater	See Section 10 above	0.0198 MGD	38° 39' 43" / 77° 17' 19"
See Attachment 3 for the Occoquan topographic map.				

11. **Sludge Treatment and Disposal Methods:**

Waste activated sludge is pumped from the secondary clarifier to a sludge holding tank (SHT). The holding tank is allowed to settle, and the clear supernatant is pumped back to the aeration basin. On an as needed basis, waste sludge is pumped and hauled to the Massaponax Wastewater Treatment Facility (VA0025658) for further treatment and composting.

12. **Discharges Located Within Waterbody VAN-A25R:**

TABLE 2 DISCHARGES			
Permit Number	Facility Name	Type	Receiving Stream
VA0023299	Gunston Elementary School	Municipal Individual Discharge Permits	South Branch Massey Creek
VA0024724	Dale Service Corp. – Section 1		Neabsco Creek, UT
VA0024678	Dale Service Corp. – Section 8		Neabsco Creek
VA0090026	Kim Young J STP (not built)	Single Family Home Individual Discharge Permit	Thompson's Creek, UT
VAG110083	Virginia Concrete Co., Inc. – Woodbridge	Ready-Mix Concrete General Permits	Occoquan River
VAG110085	Virginia Concrete Co., Inc. – Lorton		Giles Run, UT

TABLE 2 (CONTINUED)			
Permit Number	Facility Name	Type	Receiving Stream
VAR051811	Davis Industries	Stormwater Industrial General Permits	Giles Run
VAR051071	Covanta Fairfax Inc.		
VAR051083	Owen and Sparrow LLC		
VAR051076	Interstate 95 Landfill		
VAR052014	Double T Automotive, Inc.		Cow Branch
VAR051477	First Transit, Inc.		Neabsco Creek
VAR051081	Rainwater Landfill		Giles Run, UT
VAR051079	Lorton CDD Landfill		
VAR051939	American Auto Savage		Marumsc Creek, UT
VAR051006	AAAACO Auto Parts, Inc.		Giles Run
VAG406104	Belmont Bay Associates LC	Single Family Home General Permits	Belmont Bay
VAG406093	Allen Marie M Residence		
VAG840101	Vulcan Construction Materials – Graham	Nonmetallic Mineral Mining General Permit	Little Occoquan Run, UT Occoquan River, UT

13. **Material Storage:**

TABLE 3 MATERIAL STORAGE		
Materials Description	Volume Stored	Spill/Stormwater Prevention Measures
Acticlean Gel	Two (2) 1-gallon containers	Under roof

14. **Site Inspection:** Performed by DEQ-NRO Compliance Staff on 1 November 2011 (see **Attachment 4**).

15. **Receiving Stream Water Quality and Water Quality Standards:**

a. Ambient Water Quality Data

Marumsc Creek is the receiving stream, however there is no water quality monitoring information available for this portion of Marumsc Creek. There is water quality monitoring data available on a further downstream segment of Marumsc Creek. The nearest downstream DEQ water quality monitoring station on Marumsc Creek is station 1aMAU0001.16, located at the Featherstone Drive bridge crossing in Veterans Park, approximately 3.0 miles downstream of Outfall 001. The following is the monitoring summary for this segment of Marumsc Creek, as taken from the Draft 2012 Integrated Report*:

Class II, Section 6, special stds. b, y.

DEQ ambient monitoring station 1aMAU001.16, at Featherstone Drive in Veterans Park.

E. coli monitoring finds a bacterial impairment, resulting in an impaired classification for the recreation use.

The fish consumption use is categorized as impaired due to a Virginia Department of Health, Division of Health Hazards Control, PCB fish consumption advisory. A PCB TMDL for the tidal Potomac River watershed has been completed and approved.

The aquatic life use is fully supporting. The wildlife use was not assessed.

*The Draft 2012 Integrated Report (IR) has been through the public comment period and reviewed by EPA. The 2012 IR is currently being finalized and prepared for release.

b. 303(d) Listed Stream Segments and Total Maximum Daily Loads (TMDLs)

TABLE 4 IMPAIRMENTS/TMDL ASSESSMENT							
Waterbody Name	Impaired Use	Cause	Distance From Outfall	TMDL completed	WLA	Basis for WLA	TMDL Schedule
<i>Impairment Information in the Draft 2012 Integrated Report*</i>							
Marumsco Creek (tidal)	Recreation	<i>E. coli</i>	2.87 miles	No	---	---	2024
	Fish Consumption	PCBs	2.87 miles	Tidal Potomac PCB TMDL 10/31/2007	None	---	NA

*The Draft 2012 Integrated Report (IR) has been through the public comment period and reviewed by EPA. The 2012 IR is currently being finalized and prepared for release.

The full planning statement is found in **Attachment 5**.

c. Receiving Stream Water Quality Criteria

Part IX of 9VAC25-260(360-550) designates classes and special standards applicable to defined Virginia river basins and sections. The receiving stream, Marumsco Creek, is located within Section 07 of the Potomac River Basin and classified as Class III water.

At all times, Class III waters must achieve a dissolved oxygen (D.O.) of 4.0 mg/L or greater, a daily average D.O. of 5.0 mg/L or greater, a temperature that does not exceed 32° C and maintain a pH of 6.0 – 9.0 standard units (S.U.).

Attachment 6 details other water quality criteria applicable to the receiving stream.

Ammonia:

The fresh water, aquatic life Water Quality Criteria for ammonia is dependent on the instream and/or the effluent temperature and pH values. The 90th percentile temperature and pH values are used because they best represent the critical conditions of the receiving stream. The critical 30Q10 flow is 0.0 MGD and ambient water quality data for the receiving stream is not available; therefore, staff used effluent pH (**Attachment 7**) and temperature (**Attachment 8**) data obtained from March 2008 to July 2012 Discharge Monitoring Reports.

It should be noted that only the maximum reported values for pH and temperature were utilized to calculate the water quality criteria. It is staff's best professional judgement that this best represents the critical conditions that could occur and provides a conservative approach to ensure the receiving stream is protected at all times.

The ammonia water quality standards calculations are shown in **Attachment 6**.

Metals Criteria:

The Water Quality Criteria for some metals are dependent on the receiving stream and/or the effluent hardness values (expressed as mg/L calcium carbonate). There is no hardness data for this facility and the 7Q10 of the receiving stream is zero and no ambient data is available; therefore, staff guidance suggests using a default hardness value of 50 mg/L CaCO₃ for streams east of the Blue Ridge. The hardness-dependent metals criteria shown in **Attachment 6** are based on this average value.

Bacteria Criteria:

The Virginia Water Quality Standards at 9VAC25-260-170.A state that the following criteria shall apply to protect primary recreational uses in surface waters.

E. coli bacteria per 100 mL of water shall not exceed a monthly geometric mean of the following:

	Geometric Mean ¹
Freshwater <i>E. coli</i> (N/100 mL)	126

¹For a minimum of four (4) weekly samples taken during any calendar month

d. Receiving Stream Special Standards

The State Water Control Board's Water Quality Standards, River Basin Section Tables (9VAC25-260-360, 370 and 380) designates the river basins, sections, classes and special standards for surface waters of the Commonwealth of Virginia. The receiving stream, Marumsco Creek, is located within Section 07 of the Potomac River Basin. This section has been designated with a special standard of "b".

Special Standard "b" (Potomac Embayment Standards) established effluent standards for all sewage plants discharging into Potomac River embayments and for expansions of existing plants discharging into non-tidal tributaries of these embayments. 9VAC25-415, Policy for the Potomac Embayments, controls point source discharges of conventional pollutants into the Virginia embayment waters of the Potomac River and tributaries from the fall line at Chain Bridge in Arlington County to the Route 301 Bridge in King George County. The regulation sets effluent limits for BOD₅, total suspended solids, phosphorus and ammonia, to protect the water quality of these high profile waterbodies.

The Potomac Embayment Standards are not applicable to this discharge since the design flow is less than 0.05 MGD (9VAC25-415-30.B.).

e. Threatened or Endangered Species

The Virginia DGIF Fish and Wildlife Information System Database was searched on 2 August 2012 for records to determine if there are threatened or endangered species in the vicinity of the discharge. The following threatened or endangered species were identified within a 2 mile radius of the discharge: Atlantic Sturgeon; Brook Floater (mussel); Wood Turtle; Upland Sandpiper (song bird); Loggerhead Shrike (song bird); Henslow's Sparrow; Appalachian Grizzled Skipper (butterfly); Bald Eagle; Migrant Loggerhead Shrike (song bird). The limits proposed in this draft permit are protective of the Virginia Water Quality Standards and protect the threatened and endangered species found near the discharge.

16. Antidegradation (9VAC25-260-30):

All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The receiving stream critical 7Q10, 30Q10 and 1Q10 flows have been determined to be 0.0 MGD and at times the stream flow is comprised of only effluent. Therefore, it is staff's best professional judgment that such streams are considered Tier 1. Permit limits proposed have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

17. Effluent Screening, Wasteload Allocation and Effluent Limitation Development:

To determine water quality-based effluent limitations for a discharge, the suitability of data must first be determined. Data is suitable for analysis if one or more representative data points are equal to or above the quantification level ("QL") and the data represent the exact pollutant being evaluated.

Next, the appropriate Water Quality Standards (WQS) are determined for the pollutants in the effluent. Then, the Wasteload Allocations (WLAs) are calculated. In this case since the critical flows 7Q10 and 1Q10 have been determined to be zero, the WLAs are equal to the WQS. The WLA values are then compared with available effluent data to determine the need for effluent limitations. Effluent limitations are needed if the 97th percentile of the daily effluent concentration values is greater than the acute wasteload allocation or if the 97th percentile of the four-day average effluent concentration values is greater than the chronic wasteload allocation. Effluent limitations are based on the most limiting WLA, the required sampling frequency and statistical characteristics of the effluent data.

a. Effluent Screening

Effluent data obtained from the permit application and February 2008 – June 2012 Discharge Monitoring Reports (DMRs) have been reviewed and determined to be suitable for evaluation. Please see **Attachment 7** for a summary of effluent data.

b. Mixing Zones and Wasteload Allocations (WLAs)

Wasteload allocations (WLAs) are calculated for those parameters in the effluent with the reasonable potential to cause an exceedance of water quality criteria. The basic calculation for establishing a WLA is the steady state complete mix equation:

$$WLA = \frac{C_o [Q_e + (f)(Q_s)] - [(C_s)(f)(Q_s)]}{Q_e}$$

Where:

WLA	=	Wasteload allocation
C _o	=	In-stream water quality criteria
Q _e	=	Design flow
Q _s	=	Critical receiving stream flow (1Q10 for acute aquatic life criteria; 7Q10 for chronic aquatic life criteria; harmonic mean for carcinogen-human health criteria; 30Q10 for ammonia criteria; and 30Q5 for non-carcinogen human health criteria)
f	=	Decimal fraction of critical flow
C _s	=	Mean background concentration of parameter in the receiving stream.

The water segment receiving the discharge via Outfall 001 is considered to have a 7Q10, 30Q10 and 1Q10 of 0.0 MGD. As such, there is no mixing zone and the WLA is equal to the C_o.

c. Effluent Limitations and Monitoring, Outfall 001 – Toxic Pollutants

9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Those parameters with WLAs that are near effluent concentrations are evaluated for limits.

The VPDES Permit Regulation at 9VAC25-31-230.D. requires that monthly and weekly average limitations be imposed for continuous discharges from POTWs and monthly average and daily maximum limitations be imposed for all other continuous non-POTW discharges.

1). Ammonia as N:

Staff utilized effluent pH and temperature data submitted on the March 2008 – July 2012 Discharge Monitoring Reports (DMRs) to determine the ammonia water quality criteria, wasteload allocations (WLAs) and ammonia limits (**Attachment 9**). DEQ guidance suggests using a sole data point of 9.0 mg/L for discharges containing domestic sewage to ensure the evaluation adequately addresses the potential for ammonia to be present.

The calculated ammonia limitations are less stringent than those found in the previous permit. VPDES Regulations, 9VAC25-31-210.L., do not allow relaxation of limitations due to new water quality criteria; therefore, the previous limits of 2.2 mg/L for the months May – October and 3.1 mg/L for the months November – April will be carried forward with this reissuance. See **Attachment 10** for the ammonia limitation derivations.

2). Total Residual Chlorine:

The facility utilizes ultraviolet (UV) light for disinfection; therefore, chlorine limitations are not warranted.

3). Metals/Organics:

Given the wastewater source, it is staff's best professional judgement that limits are not warranted.

d. Effluent Limitations and Monitoring, Outfall 001 – Conventional and Non-Conventional Pollutants

No changes to dissolved oxygen (D.O.), biochemical oxygen demand-5 day (BOD₅), total suspended solids (TSS), ammonia as N, pH and *E. coli* limitations are proposed.

Dissolved Oxygen and BOD₅ limitations are based on the mathematical stream modeling conducted in August 1974 (**Attachment 11**) and are set to meet the water quality criteria for D.O. in the receiving stream.

It is staff's practice to equate the Total Suspended Solids limits with the BOD₅ limits since the two pollutants are closely related in terms of treatment of domestic sewage.

pH limitations are set at the water quality criteria.

E. coli limitations are in accordance with the Water Quality Standards 9VAC25-260-170.

e. Effluent Limitations and Monitoring Summary

The effluent limitations are presented in the following table. Limits were established for BOD₅, Total Suspended Solids, Ammonia as N, pH, Dissolved Oxygen and *E. coli*.

The limit for Total Suspended Solids is based on Best Professional Judgement.

The mass loading (kg/d) for BOD₅ and TSS monthly and weekly averages were calculated by multiplying the concentration values (mg/L), with the flow values (in MGD) and then by a conversion factor of 3.785.

Sample Type and Frequency are in accordance with the recommendations in the VPDES Permit Manual.

The VPDES Permit Regulation at 9VAC25-31-30 and 40 CFR Part 133 require that the facility achieve at least 85% removal for BOD and TSS (or 65% for equivalent to secondary). The limits in this permit are water-quality-based effluent limits and result in greater than 85% removal.

18. **Antibacksliding:**

All limits in this permit are at least as stringent as those previously established. Backsliding does not apply to this reissuance.

19. Effluent Limitations/Monitoring Requirements:

Design flow is 0.0198 MGD.

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NA	NL	NA	NA	NL	1/D	Estimate
pH	3	NA	NA	6.0 S.U.	9.0 S.U.	1/D	Grab
BOD ₅	3,4	20 mg/L 1.5 kg/day	30 mg/L 2.2 kg/day	NA	NA	1/M	Grab
Total Suspended Solids (TSS)	2	20 mg/L 1.5 kg/day	30 mg/L 2.2 kg/day	NA	NA	1/M	Grab
Dissolved Oxygen (DO)	3,4	NA	NA	6.0 mg/L	NA	1/D	Grab
Ammonia, as N (May – October)	3	2.2 mg/L	2.2 mg/L	NA	NA	1/M	Grab
Ammonia, as N (November – April)	3	3.1 mg/L	3.1 mg/L	NA	NA	1/M	Grab
<i>E. coli</i> (Geometric Mean)*	3	126 n/100mL	NA	NA	NA	1/W	Grab

The basis for the limitations codes are:

- | | | |
|----------------------------------|---|--------------------------------|
| 1. Federal Effluent Requirements | <i>MGD</i> = Million gallons per day. | <i>1/D</i> = Once every day. |
| 2. Best Professional Judgement | <i>NA</i> = Not applicable. | <i>1/W</i> = Once every week. |
| 3. Water Quality Standards | <i>NL</i> = No limit; monitor and report. | <i>1/M</i> = Once every month. |
| 4. Stream Model – Attachment 11 | <i>S.U.</i> = Standard units. | |

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

*Samples shall be collected between the hours of 10 A.M. and 4 P.M.

20. Other Permit Requirements:Part I.B. of the permit contains quantification levels and compliance reporting instructions

9VAC25-31-190.L.4.c. requires an arithmetic mean for measurement averaging and 9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Specific analytical methodologies for toxics are listed in this permit section as well as quantification levels (QLs) necessary to demonstrate compliance with applicable permit limitations or for use in future evaluations to determine if the pollutant has reasonable potential to cause or contribute to a violation. Required averaging methodologies are also specified.

21. Other Special Conditions:

- a. 95% Capacity Reopener. The VPDES Permit Regulation at 9VAC25-31-200.B.4 requires all POTWs and PVOTWs develop and submit a plan of action to DEQ when the monthly average influent flow to their sewage treatment plant reaches 95% or more of the design capacity authorized in the permit for each month of any three consecutive month period. The facility is a PVOTW.
- b. Indirect Dischargers. Required by VPDES Permit Regulation, 9VAC25-31-200.B.1 and B.2 for POTWs and PVOTWs that receive waste from someone other than the owner of the treatment works.
- c. O&M Manual Requirement. Required by Code of Virginia §62.1-44.19; Sewage Collection and Treatment Regulations, 9VAC25-790; VPDES Permit Regulation, 9VAC25-31-190.E. The permittee shall maintain a current Operations and Maintenance (O&M) Manual. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M Manual available to Department personnel for review upon request. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. Non-compliance with the O&M Manual shall be deemed a violation of the permit.
- d. CTC, CTO Requirement. The Code of Virginia § 62.1-44.19; Sewage Collection and Treatment Regulations, 9VAC25-790 requires that all treatment works treating wastewater obtain a Certificate to Construct prior to commencing construction and to obtain a Certificate to Operate prior to commencing operation of the treatment works.
- e. Financial Assurance. Required by Code of Virginia §62.1-44.18:3 and the Board's Financial Assurance Regulation, 9VAC25-650-1, et seq. which requires owners and operators of PVOTWs with a design flow > 0.005 MGD but < 0.040 MGD and treating sewage from private residences to submit a closure plan and maintain adequate financial assurance in the event the facility ceases operations. The permitted facility is a PVOTW with a design flow of 0.0198 MGD and treats sewage generated from private residences.
- f. Licensed Operator Requirement. The Code of Virginia at §54.1-2300 et seq. and the VPDES Permit Regulation at 9VAC25-31-200.C, and Rules and Regulations for Waterworks and Wastewater Works Operators (18VAC160-20-10 et seq.) requires licensure of operators. This facility requires a Class III operator.
- g. Reliability Class. The Sewage Collection and Treatment Regulations at 9VAC25-790 require sewage treatment works to achieve a certain level of reliability in order to protect water quality and public health consequences in the event of component or system failure. Reliability means a measure of the ability of the treatment works to perform its designated function without failure or interruption of service. The facility is required to meet a reliability Class of I.
- h. Sludge Reopener. The VPDES Permit Regulation at 9VAC25-31-220.C. requires all permits issued to treatment works treating domestic sewage (including sludge-only facilities) include a reopener clause allowing incorporation of any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the CWA. The facility includes a sewage treatment works.
- i. Sludge Use and Disposal. The VPDES Permit Regulation at 9VAC25-31-100.P; 220.B.2., and 420 through 720 and 40 CFR Part 503 require all treatment works treating domestic sewage to submit information on their sludge use and disposal practices and to meet specified standards for sludge use and disposal. The facility includes a treatment works treating domestic sewage.
- j. Treatment Works Closure Plan. The State Water Control Law §62.1-44.15:1.1, makes it illegal for an owner to cease operation and fail to implement a closure plan when failure to implement the plan would result in harm to human health or the environment. This condition is used to notify the owner of the need for a closure plan where a facility is being replaced or is expected to close.
- k. TMDL Reopener. This special condition allows the permit to be reopened if necessary to bring it into compliance with any applicable TMDL that may be developed and approved for the receiving stream.

22. **Permit Section Part II.** Part II of the permit contains standard conditions that appear in all VPDES Permits. In general, these standard conditions address the responsibilities of the permittee, reporting requirements, testing procedures and records retention.

23. **Changes to the Permit from the Previously Issued Permit:**

- a. Special Conditions: None.
- b. Monitoring and Effluent Limitations:
 - Temperature monitoring was removed with this reissuance.
 - Bacteria monitoring frequency was increased from 2/M to 1/W to reflect current VPDES Permit Manual.
 - The average loading for BOD and TSS was corrected with this reissuance. Calculation error during last reissuance.
- c. Other:
 - The receiving stream was updated; changed from Marumsco Creek, UT to Marumsco Creek.
 - Part II of the permit has been updated to include VELAP requirements.

24. **Variances/Alternate Limits or Conditions:** None.

25. **Public Notice Information:**

First Public Notice Date: 5 December 2012 Second Public Notice Date: 12 December 2012

Public Notice Information is required by 9VAC25-31-280.B. All pertinent information is on file and may be inspected, and copied by contacting the: DEQ Northern Regional Office; 13901 Crown Court, Woodbridge, VA 22193; Telephone No. (703) 583-3873; Douglas.Frasier@deq.virginia.gov. See **Attachment 12** for a copy of the public notice document.

Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer and of all persons represented by the commenter/requester, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit. Requests for public hearings shall state 1) the reason why a hearing is requested; 2) a brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit; and 3) specific references, where possible, to terms and conditions of the permit with suggested revisions. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given. The public may request an electronic copy of the draft permit and fact sheet or review the draft permit and application at the DEQ Northern Regional Office by appointment.

26. **Additional Comments:**

Previous Board Action(s): The facility entered a Special Order by Consent effective 18 December 2006 due to administrative deficiencies and limitation excursions. This Order was terminated on 20 May 2009 after the facility was able to fulfill the Order requirements and return to compliance.

See **Attachment 13** for the complete order.

Staff Comments: None.

Public Comment: No comments were received during the public notice.

EPA Checklist: The checklist can be found in **Attachment 14**.

Fact Sheet Attachments

Table of Contents

Woodbridge Mobile Home Park STP
VA0027855
2013 Reissuance

Attachment 1	Flow Frequency Determination
Attachment 2	Facility Schematic/Diagram
Attachment 3	Topographic Map
Attachment 4	Site Inspection Report
Attachment 5	Planning Statement
Attachment 6	Water Quality Criteria / Wasteload Allocation Analysis
Attachment 7	February 2008 – June 2012 Effluent Data
Attachment 8	February 2008 – June 2012 Effluent Temperature Data
Attachment 9	Ammonia Limit Derivations – Present Permit Reissuance
Attachment 10	Ammonia Limit Derivations – Previous Permit Reissuance
Attachment 11	August 1974 Stream Model
Attachment 12	Public Notice
Attachment 13	2006 Special Order by Consent
Attachment 14	EPA Checklist

MEMORANDUM

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court

Woodbridge, VA 22193

TO: VPDES Reissuance File VA0027855

DATE: 17 October 2012

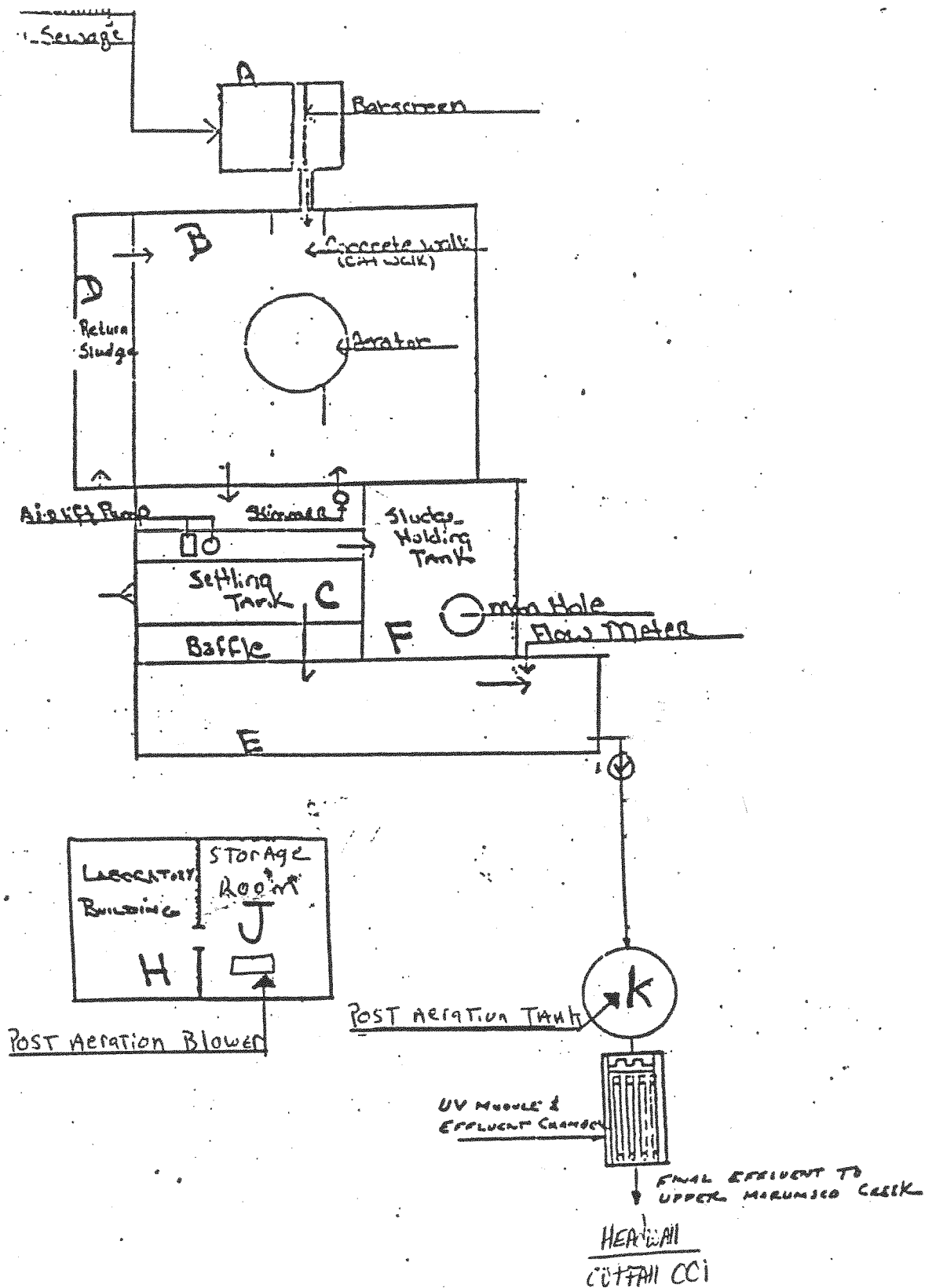
FROM: Douglas Frasier

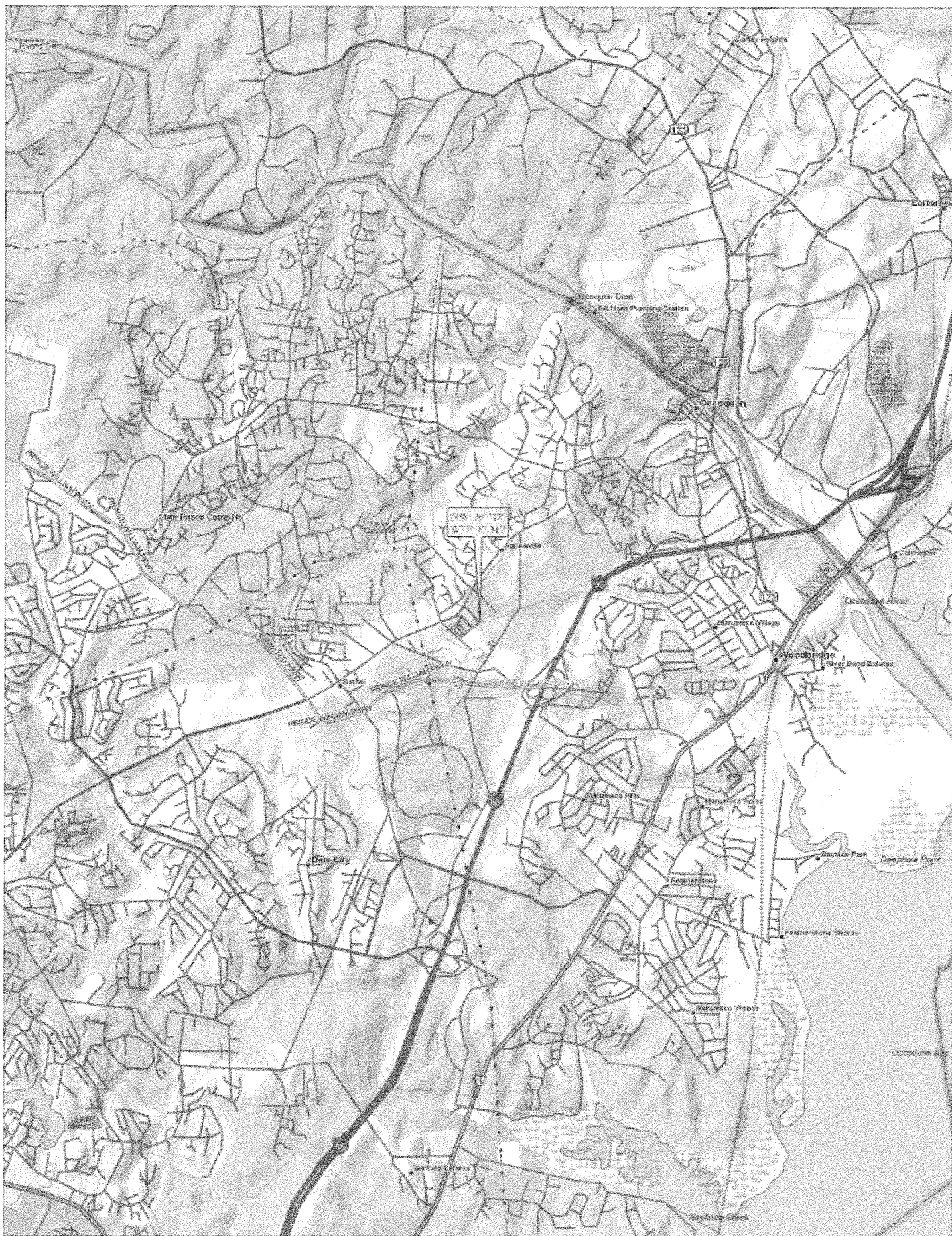
SUBJECT: Update of flow frequencies for the 2012 reissuance
Woodbridge Mobile Home Park

The purpose of this memo is to update the Paul Herman 1997 flow frequency determination for this facility. Upon review by the Planning group, it was determined that the Woodbridge Mobile Home Park discharges to Marumsco Creek, not an unnamed tributary of said receiving stream. No other changes or updates were completed. Stream flow frequencies are required at this site for use in the development of effluent limitations for this VPDES permit.

The following was extracted from the Paul Herman 1997 memo verbatim:

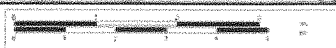
The values at the discharge point were determined by inspection of the USGS Occoquan Quadrangle topographical map which shows the receiving stream as intermittent at the discharge point. The flow frequencies for intermittent streams are 0.0 cfs for the 1Q10, 7Q10, 30Q5, high flow 1Q10, high flow 7Q10, and the harmonic mean.





DELORME

© 2002 DeLorme, 3-D TopoQuads. All Data copyright of content owners.
www.delorme.com





COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193

(703) 583-3800 Fax (703) 583-3821

www.deq.virginia.gov

Douglas Domenech
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

November 22, 2011

Mr. Bradley Dressler
Woodbridge MHP, LLC
49 SW Flagler Ave
Suite 201
Stuart, FL 34994

Re: Woodbridge MHP STP, Permit #VA0027855

Dear Mr. Dressler:

Attached is a copy of the Inspection Report generated from the Facility Inspection conducted at Woodbridge Mobile Home Park – Sewage Treatment Plant (STP) on November 1, 2011. This letter is not intended as a case decision under the Virginia Administrative Process Act, Va. Code § 2.2-4000 *et seq.* (APA).

Additional inspections may be conducted to confirm that the facility is in compliance with permit requirements.

If you have any questions or comments concerning this report, please feel free to contact me at the Northern Regional Office at (703) 583-3882 or by E-mail at Sharon.Allen@deq.virginia.gov.

Sincerely,

A handwritten signature in cursive script that reads "Sharon Allen".


Sharon Allen
Environmental Specialist II

Cc: Permits

Electronic copy sent:
Compliance Manager
Compliance Auditor
Enforcement

Virginia Department of Environmental Quality

RECON INSPECTION REPORT

FACILITY NAME: Woodbridge MHP STP		INSPECTION DATE: November 1, 2011	
		INSPECTOR S. Allen	
PERMIT No.: VA0027855		REPORT DATE: November 21, 2011	
TYPE OF FACILITY: <input checked="" type="checkbox"/> Municipal <input type="checkbox"/> Major <input type="checkbox"/> Industrial <input type="checkbox"/> Minor <input type="checkbox"/> Federal <input checked="" type="checkbox"/> Small Minor <input type="checkbox"/> HP <input type="checkbox"/> LP	TIME OF INSPECTION:		Arrival 1048
			Departure 1120
	TOTAL TIME SPENT (including prep & travel)		3 hours
PHOTOGRAPHS: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		UNANNOUNCED INSPECTION? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
REVIEWED BY / Date:  11/21/11			
PRESENT DURING INSPECTION: None			

INSPECTION OVERVIEW AND CONDITION OF TREATMENT UNITS

- Weather- clear and sunny.
- There is a gap underneath the fence around the Sewage Treatment Plant (STP) near the driveway for the neighboring mobile home (photo 1). This should be repaired.
- No operator on site at the STP. The privacy screen around the plant was down in places. I observed the plant operation through the fence.
- The plant was running. The color in the aeration basins was a chocolate brown with no foam. There was a slight earthy odor.
- I did see settled solids in the clarifier effluent channel.
- The gate into the STP was locked; I did not check the UV disinfection or post aeration tank.
- The path to Outfall 001 is accessible (photo 4) and the tree that had fallen and blocked the path near the discharge pipe has been moved since the last inspection on June 30, 2011.
- Outfall 001 was in good condition (photo 5). No odor or solids noted. There was a fairly good flow in the receiving stream.
- There has been progress with replacing the potable water and sewer lines. The excavation holes I noted during the last inspection (June 2011) are filled in, and there were new excavations and new pipe laid.
- PVC lines, couplings, and other supplies and equipment are being stored in an area near the mail boxes.
- I spoke to the crew onsite doing the line replacements. They said they had completed new water & sewer lines for 26 trailers, along south and east side of the mobile home park, and hoped to have the final four mobile homes in the section done by November 4, 2011. They plan to return in spring 2012 to replace lines for the final two rows.

Permit # VA0027855

EFFLUENT FIELD DATA: NA

Flow	<input type="text"/> MGD	Dissolved Oxygen	<input type="text"/> mg/L	TRC (Contact Tank)	<input type="text"/> mg/L
pH	<input type="text"/> S.U.	Temperature	<input type="text"/> °C	TRC (Final Effluent)	<input type="text"/> mg/L
Was a Sampling Inspection conducted? <input type="checkbox"/> Yes (see Sampling Inspection Report) <input checked="" type="checkbox"/> No					

CONDITION OF OUTFALL AND EFFLUENT CHARACTERISTICS:

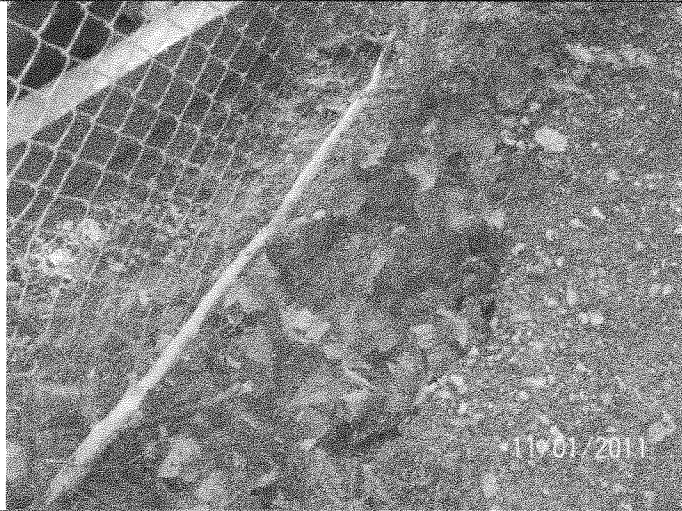
1. Type of outfall:	<input checked="" type="checkbox"/> Shore based	<input type="checkbox"/> Submerged	Diffuser?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Are the outfall and supporting structures in good condition?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
3. Final Effluent (evidence of following problems):			<input type="checkbox"/> Sludge bar	<input type="checkbox"/> Grease	
	<input type="checkbox"/> Turbid effluent	<input type="checkbox"/> Visible foam	<input type="checkbox"/> Unusual color	<input type="checkbox"/> Oil sheen	
4. Is there a visible effluent plume in the receiving stream?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
5. Receiving stream:	<input checked="" type="checkbox"/> No observed problems		<input type="checkbox"/> Indication of problems (explain below)		
<u>Comments:</u>					

REQUEST for CORRECTIVE ACTION:

1. Inform DEQ once replacement of the lines resumes in Spring 2012.

NOTES and COMMENTS:

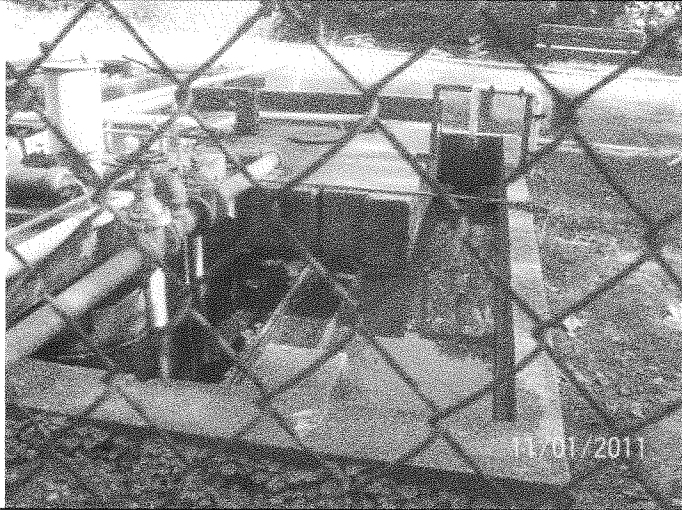
<p>I emailed Mr. Dressler on Nov 1, 2011 requesting a progress update.</p> <p>On Nov 2, 2011, he wrote back and confirmed the work done by the crew. Work has gone slower than he had hoped for, and the heavy rains this summer/fall "killed the schedule and budget". Mr. Dressler stated that he hoped to have the crew resume in late spring 2012 and have the project completed in about 75 days.</p>
--



1) Gap/ hole under STP fence.



2) Aeration basin.



3) Clarifier and effluent channel



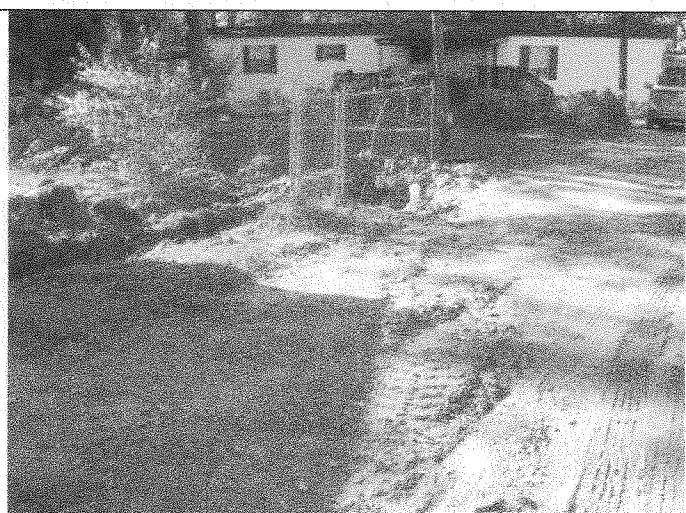
4) Path to outfall



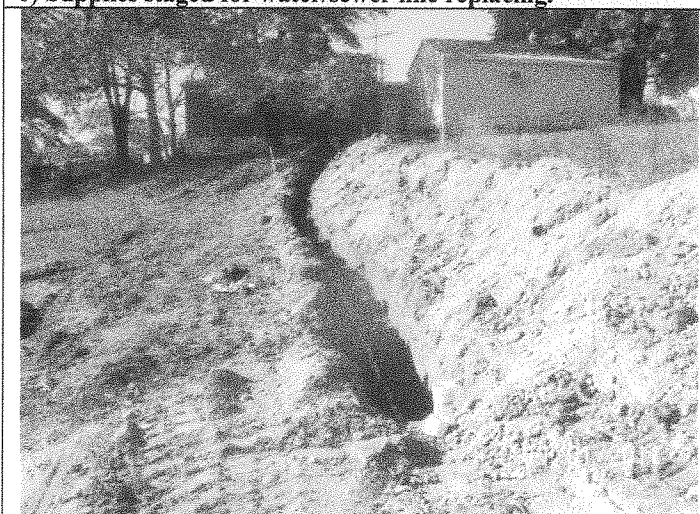
5) Outfall 001.



6) Supplies staged for water/sewer line replacing.



7) Excavation for new line.



8) Excavation for new line.

Facility name: Woodbridge MHP STP
Site Inspection Date: November 1, 2011

VPDES Permit No. VA0027855
Photos & Layout by: S. Allen

To: Douglas Frasier
From: Jennifer Carlson

Date: 1 August 2012
Subject: Planning Statement for Woodbridge MHP WWTP
Permit Number: VA0027855

Information for Outfall 001:

Discharge Type: Municipal, minor
Discharge Flow: 0.0198 MGD
Receiving Stream: Marumsco Creek
Latitude / Longitude: 38° 39' 43" / 77° 17' 18.7"
Rivermile: 4.1
Streamcode: 1aMAU
Waterbody: VAN-A25R
Water Quality Standards: Class III, Section 7, sp stds. b

1. Please provide water quality monitoring information for the receiving stream segment. If there is not monitoring information for the receiving stream segment, please provide information on the nearest downstream monitoring station, including how far downstream the monitoring station is from the outfall.

Marumsco Creek is the receiving stream, however there is no water quality monitoring information available for this portion of Marumsco Creek. There is water quality monitoring data available on a further downstream segment of Marumsco Creek. The nearest downstream DEQ water quality monitoring station on Marumsco Creek is station 1aMAU0001.16, located at the Featherstone Drive bridge crossing in Veterans Park, approximately 3.0 miles downstream of Outfall 001. The following is the monitoring summary for this segment of Marumsco Creek, as taken from the Draft 2012 Integrated Report*:

Class II, Section 6, special stds. b, y.

DEQ ambient monitoring station 1aMAU001.16, at Featherstone Drive in Veterans Park.

E. coli monitoring finds a bacterial impairment, resulting in an impaired classification for the recreation use.

The fish consumption use is categorized as impaired due to a Virginia Department of Health, Division of Health Hazards Control, PCB fish consumption advisory. A PCB TMDL for the tidal Potomac River watershed has been completed and approved.

The aquatic life use is fully supporting. The wildlife use was not assessed.

**The Draft 2012 Integrated Report (IR) has been through the public comment period and reviewed by EPA. The 2012 IR is currently being finalized and prepared for release.*

2. Does this facility discharge to a stream segment on the 303(d) list? If yes, please fill out Table A.

No.

3. Are there any downstream 303(d) listed impairments that are relevant to this discharge? If yes, please fill out Table B.

Yes.

Table B. Information on Downstream 303(d) Impairments and TMDLs

Waterbody Name	Impaired Use	Cause	Distance From Outfall	TMDL completed	WLA	Basis for WLA	TMDL Schedule
<i>Impairment Information in the Draft 2012 Integrated Report*</i>							
Marumsc Creek (tidal)	Recreation	<i>E. coli</i>	2.87 miles	No	---	---	2024
	Fish Consumption	PCBs	2.87 miles	Tidal Potomac PCB TMDL 10/31/2007	None	---	N/A

**The Draft 2012 Integrated Report (IR) has been through the public comment period and reviewed by EPA. The 2012 IR is currently being finalized and prepared for release.*

4. Is there monitoring or other conditions that Planning/Assessment needs in the permit?

In support of the Potomac River PCB TMDL that was developed in 2007, this facility is a candidate for low-level PCB monitoring, based on its Standard Industrial Classification (SIC) code. Low-level PCB analysis uses EPA Method 1668B, which is capable of detecting low-level concentrations for all 209 PCB congeners. The Assessment/TMDL Staff has concluded that low-level PCB monitoring is not warranted for this facility, as it is not expected to be a source of PCBs. Based on this information, this facility will not be requested to monitor for low-level PCBs.

There is a completed downstream TMDL for the aquatic life use impairment for the Chesapeake Bay. However, the Bay TMDL and the WLAs contained within the TMDL are not addressed in this planning statement.

5. Fact Sheet Requirements – Please provide information regarding any drinking water intakes located within a 5 mile radius of the discharge point.

There are no public water supply intakes located within 5 miles of this discharge.

FRESHWATER WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: Woodbridge MHP Permit No.: VA0027855
 Receiving Stream: Marumsco Creek
 Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information		Stream Flows		Mixing Information		Effluent Information	
Mean Hardness (as CaCO3) =	mg/L	1Q10 (Annual) =	MGD	Annual - 1Q10 Mix =	0 %	Mean Hardness (as CaCO3) =	50 mg/L
90% Temperature (Annual) =	deg C	7Q10 (Annual) =	MGD	- 7Q10 Mix =	0 %	90% Temp (Annual) =	23 deg C
90% Temperature (Wet season) =	deg C	3Q10 (Annual) =	MGD	- 3Q10 Mix =	0 %	90% Temp (Wet season) =	13 deg C
90% Maximum pH =	SU	1Q10 (Wet season) =	MGD	Wet Season - 1Q10 Mix =	0 %	90% Maximum pH =	7.7 SU
10% Maximum pH =	SU	3Q10 (Wet season) =	MGD	- 3Q10 Mix =	0 %	10% Maximum pH =	7 SU
Tier Designation (1 or 2) =	1	3Q05 =	MGD	Discharge Flow =			0.0198 MGD
Public Water Supply (PWS) Y/N? =	n	Harmonic Mean =	MGD				
Trout Present Y/N? =	n						
Early Life Stages Present Y/N? =	y						

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			Most Limiting Allocations		
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)
Acenaphthene	5	--	--	na	9.9E+02	--	--	na	9.9E+02	--	--	--	--	--	--	na
Acrolein	0	--	--	na	9.3E+00	--	--	na	9.3E+00	--	--	--	--	--	--	na
Acrylonitrile ^c	0	--	--	na	2.5E+00	--	--	na	2.5E+00	--	--	--	--	--	--	na
Aldrin ^c	0	3.0E+00	--	na	5.0E-04	3.0E+00	--	na	5.0E-04	--	--	--	--	3.0E+00	--	na
Ammonia-N (mg/l)	0	1.44E+01	2.07E+00	na	--	1.44E+01	2.07E+00	na	--	--	--	--	--	1.44E+01	2.07E+00	na
Ammonia-N (mg/l) (High Flow)	0	1.44E+01	3.58E+00	na	--	1.44E+01	3.58E+00	na	--	--	--	--	--	1.44E+01	3.58E+00	na
Anthracene	0	--	--	na	4.0E+04	--	--	na	4.0E+04	--	--	--	--	--	--	na
Antimony	0	--	--	na	6.4E+02	--	--	na	6.4E+02	--	--	--	--	--	--	na
Arsenic	0	3.4E+02	1.5E+02	na	--	3.4E+02	1.5E+02	na	--	--	--	--	--	3.4E+02	1.5E+02	na
Barium ^c	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
Benzene ^c	0	--	--	na	5.1E+02	--	--	na	5.1E+02	--	--	--	--	--	--	na
Benzidine ^c	0	--	--	na	2.0E-03	--	--	na	2.0E-03	--	--	--	--	--	--	na
Benzo (a) anthracene ^c	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	na
Benzo (b) fluoranthene ^c	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	na
Benzo (k) fluoranthene ^c	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	na
Benzo (a) pyrene ^c	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	na
Bis(2-Chloroethyl) Ether ^c	0	--	--	na	5.3E+00	--	--	na	5.3E+00	--	--	--	--	--	--	na
Bis(2-Chloroisopropyl) Ether ^c	0	--	--	na	6.5E+04	--	--	na	6.5E+04	--	--	--	--	--	--	na
Bis 2-Ethylhexyl Phthalate ^c	0	--	--	na	2.2E+01	--	--	na	2.2E+01	--	--	--	--	--	--	na
Bromofom ^c	0	--	--	na	1.4E+03	--	--	na	1.4E+03	--	--	--	--	--	--	na
Butylbenzylphthalate	0	--	--	na	1.9E+03	--	--	na	1.9E+03	--	--	--	--	--	--	na
Cadmium	0	1.8E+00	6.6E-01	na	--	1.8E+00	6.6E-01	na	--	--	--	--	--	1.8E+00	6.6E-01	na
Carbon Tetrachloride ^c	0	--	--	na	1.6E+01	--	--	na	1.6E+01	--	--	--	--	--	--	na
Chlordane ^c	0	2.4E+00	4.3E-03	na	8.1E-03	2.4E+00	4.3E-03	na	8.1E-03	--	--	--	--	2.4E+00	4.3E-03	na
Chloride	0	8.6E+05	2.3E+05	na	--	8.6E+05	2.3E+05	na	--	--	--	--	--	8.6E+05	2.3E+05	na
TRC	0	1.9E+01	1.1E+01	na	--	1.9E+01	1.1E+01	na	--	--	--	--	--	1.9E+01	1.1E+01	na
Chlorobenzene	0	--	--	na	1.6E+03	--	--	na	1.6E+03	--	--	--	--	--	--	na

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			Most Limiting Allocations		
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)
Chlorodibromomethane ^c	0	--	--	na	1.3E+02	--	--	na	1.3E+02	--	--	--	--	--	--	na
Chloroform	0	--	--	na	1.1E+04	--	--	na	1.1E+04	--	--	--	--	--	--	na
2-Chloronaphthalene	0	--	--	na	1.6E+03	--	--	na	1.6E+03	--	--	--	--	--	--	na
2-Chlorophenol	0	--	--	na	1.5E+02	--	--	na	1.5E+02	--	--	--	--	--	--	na
Chlorpyrifos	0	8.3E-02	4.1E-02	na	--	8.3E-02	4.1E-02	na	--	--	--	--	--	8.3E-02	4.1E-02	na
Chromium III	0	3.2E+02	4.2E+01	na	--	3.2E+02	4.2E+01	na	--	--	--	--	--	3.2E+02	4.2E+01	na
Chromium VI	0	1.6E+01	1.1E+01	na	--	1.6E+01	1.1E+01	na	--	--	--	--	--	1.6E+01	1.1E+01	na
Chromium, Total	0	--	--	1.0E+02	--	--	--	na	--	--	--	--	--	--	--	na
Chrysene ^c	0	--	--	na	1.8E-02	--	--	na	1.8E-02	--	--	--	--	--	--	na
Copper	0	7.0E+00	5.0E+00	na	--	7.0E+00	5.0E+00	na	--	--	--	--	--	7.0E+00	5.0E+00	na
Cyanide, Free	0	2.2E+01	5.2E+00	na	1.6E+04	2.2E+01	5.2E+00	na	1.6E+04	--	--	--	--	2.2E+01	5.2E+00	na
DDD ^c	0	--	--	na	3.1E-03	--	--	na	3.1E-03	--	--	--	--	--	--	na
DDE ^c	0	--	--	na	2.2E-03	--	--	na	2.2E-03	--	--	--	--	--	--	na
DDT ^c	0	1.1E+00	1.0E-03	na	2.2E-03	1.1E+00	1.0E-03	na	2.2E-03	--	--	--	--	1.1E+00	1.0E-03	na
Demeton	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	1.0E-01	na
Diazinon	0	1.7E-01	1.7E-01	na	--	1.7E-01	1.7E-01	na	--	--	--	--	--	1.7E-01	1.7E-01	na
Dibenz(a,h)anthracene ^c	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	na
1,2-Dichlorobenzene	0	--	--	na	1.3E+03	--	--	na	1.3E+03	--	--	--	--	--	--	na
1,3-Dichlorobenzene	0	--	--	na	9.6E+02	--	--	na	9.6E+02	--	--	--	--	--	--	na
1,4-Dichlorobenzene	0	--	--	na	1.9E+02	--	--	na	1.9E+02	--	--	--	--	--	--	na
3,3-Dichlorobenzidine ^c	0	--	--	na	2.8E-01	--	--	na	2.8E-01	--	--	--	--	--	--	na
Dichlorobromomethane ^c	0	--	--	na	1.7E+02	--	--	na	1.7E+02	--	--	--	--	--	--	na
1,2-Dichloroethane ^c	0	--	--	na	3.7E+02	--	--	na	3.7E+02	--	--	--	--	--	--	na
1,1-Dichloroethylene	0	--	--	na	7.1E+03	--	--	na	7.1E+03	--	--	--	--	--	--	na
1,2-trans-dichloroethylene	0	--	--	na	1.0E+04	--	--	na	1.0E+04	--	--	--	--	--	--	na
2,4-Dichlorophenol	0	--	--	na	2.9E+02	--	--	na	2.9E+02	--	--	--	--	--	--	na
2,4-Dichlorophenoxy acetic acid (2,4-D)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
1,2-Dichloropropane ^c	0	--	--	na	1.5E+02	--	--	na	1.5E+02	--	--	--	--	--	--	na
1,3-Dichloropropene ^c	0	--	--	na	2.1E+02	--	--	na	2.1E+02	--	--	--	--	--	--	na
Dieldrin ^c	0	2.4E-01	5.6E-02	na	5.4E-04	2.4E-01	5.6E-02	na	5.4E-04	--	--	--	--	2.4E-01	5.6E-02	na
Diethyl Phthalate	0	--	--	na	4.4E+04	--	--	na	4.4E+04	--	--	--	--	--	--	na
2,4-Dimethylphenol	0	--	--	na	8.5E+02	--	--	na	8.5E+02	--	--	--	--	--	--	na
Dimethyl Phthalate	0	--	--	na	1.1E+06	--	--	na	1.1E+06	--	--	--	--	--	--	na
Di-n-Butyl Phthalate	0	--	--	na	4.5E+03	--	--	na	4.5E+03	--	--	--	--	--	--	na
2,4 Dinitrophenol	0	--	--	na	5.3E+03	--	--	na	5.3E+03	--	--	--	--	--	--	na
2-Methyl-4,6-Dinitrophenol	0	--	--	na	2.8E+02	--	--	na	2.8E+02	--	--	--	--	--	--	na
2,4-Dinitrotoluene ^c	0	--	--	na	3.4E+01	--	--	na	3.4E+01	--	--	--	--	--	--	na
Dioxin 2,3,7,8-tetrachlorodibenzo-p-dioxin	0	--	--	na	5.1E-08	--	--	na	5.1E-08	--	--	--	--	--	--	na
1,2-Diphenylhydrazine ^c	0	--	--	na	2.0E+00	--	--	na	2.0E+00	--	--	--	--	--	--	na
Alpha-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	--	--	--	--	2.2E-01	5.6E-02	na
Beta-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	--	--	--	--	2.2E-01	5.6E-02	na
Alpha + Beta Endosulfan	0	2.2E-01	5.6E-02	--	--	2.2E-01	5.6E-02	--	--	--	--	--	--	2.2E-01	5.6E-02	--
Endosulfan Sulfate	0	--	--	na	8.9E+01	--	--	na	8.9E+01	--	--	--	--	--	--	na
Endrin	0	8.6E-02	3.6E-02	na	6.0E-02	8.6E-02	3.6E-02	na	6.0E-02	--	--	--	--	8.6E-02	3.6E-02	na
Endrin Aldehyde	0	--	--	na	3.0E-01	--	--	na	3.0E-01	--	--	--	--	--	--	na

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Ethylbenzene	0	--	--	na	2.1E+03	--	--	na	2.1E+03	--	--	--	--	--	--	--	--	--	--	na	2.1E+03
Fluoranthene	0	--	--	na	1.4E+02	--	--	na	1.4E+02	--	--	--	--	--	--	--	--	--	--	na	1.4E+02
Fluorene	0	--	--	na	5.3E+03	--	--	na	5.3E+03	--	--	--	--	--	--	--	--	--	--	na	5.3E+03
Foaming Agents	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Guthion	0	--	1.0E-02	na	--	--	1.0E-02	na	--	--	--	--	--	--	--	--	--	--	1.0E-02	na	--
Heptachlor ^c	0	5.2E-01	3.8E-03	na	7.9E-04	5.2E-01	3.8E-03	na	7.9E-04	--	--	--	--	--	--	--	--	5.2E-01	3.8E-03	na	7.9E-04
Heptachlor Epoxide ^c	0	5.2E-01	3.8E-03	na	3.9E-04	5.2E-01	3.8E-03	na	3.9E-04	--	--	--	--	--	--	--	--	5.2E-01	3.8E-03	na	3.9E-04
Hexachlorobenzene ^c	0	--	--	na	2.9E-03	--	--	na	2.9E-03	--	--	--	--	--	--	--	--	--	--	na	2.9E-03
Hexachlorobutadiene ^c	0	--	--	na	1.8E+02	--	--	na	1.8E+02	--	--	--	--	--	--	--	--	--	--	na	1.8E+02
Hexachlorocyclohexane	0	--	--	na	4.9E-02	--	--	na	4.9E-02	--	--	--	--	--	--	--	--	--	--	na	4.9E-02
Alpha-BHC ^c	0	--	--	na	1.7E-01	--	--	na	1.7E-01	--	--	--	--	--	--	--	--	--	--	na	1.7E-01
Hexachlorocyclohexane	0	--	--	na	1.8E+00	9.5E-01	--	na	1.8E+00	--	--	--	--	--	--	--	--	9.5E-01	--	na	1.8E+00
Gamma-BHC ^c (Lindane)	0	--	--	na	1.1E+03	--	--	na	1.1E+03	--	--	--	--	--	--	--	--	--	--	na	1.1E+03
Hexachlorocyclopentadiene	0	--	--	na	3.3E+01	--	--	na	3.3E+01	--	--	--	--	--	--	--	--	--	--	na	3.3E+01
Hexachloroethane ^c	0	--	2.0E+00	na	--	--	2.0E+00	na	--	--	--	--	--	--	--	--	--	--	2.0E+00	na	--
Hydrogen Sulfide	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
Indeno (1,2,3-cd) pyrene ^c	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Iron	0	--	--	na	9.6E+03	--	--	na	9.6E+03	--	--	--	--	--	--	--	--	--	--	na	9.6E+03
Isophorone ^c	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Kepone	0	4.9E+01	5.6E+00	na	--	4.9E+01	5.6E+00	na	--	--	--	--	--	--	--	--	--	4.9E+01	5.6E+00	na	--
Lead	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	--	1.0E-01	na	--
Malathion	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Manganese	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Mercury	0	1.4E+00	7.7E-01	--	--	1.4E+00	7.7E-01	--	--	--	--	--	--	--	--	--	--	1.4E+00	7.7E-01	--	--
Methyl Bromide	0	--	--	na	1.5E+03	--	--	na	1.5E+03	--	--	--	--	--	--	--	--	--	--	na	1.5E+03
Methylene Chloride ^c	0	--	--	na	5.9E+03	--	--	na	5.9E+03	--	--	--	--	--	--	--	--	--	--	na	5.9E+03
Methoxychlor	0	--	3.0E-02	na	--	--	3.0E-02	na	--	--	--	--	--	--	--	--	--	--	3.0E-02	na	--
Mirex	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	--	0.0E+00	na	--
Nickel	0	1.0E+02	1.1E+01	na	4.6E+03	1.0E+02	1.1E+01	na	4.6E+03	--	--	--	--	--	--	--	--	1.0E+02	1.1E+01	na	4.6E+03
Nitrate (as N)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Nitrobenzene	0	--	--	na	6.9E+02	--	--	na	6.9E+02	--	--	--	--	--	--	--	--	--	--	na	6.9E+02
N-Nitrosodimethylamine ^c	0	--	--	na	3.0E+01	--	--	na	3.0E+01	--	--	--	--	--	--	--	--	--	--	na	3.0E+01
N-Nitrosodiphenylamine ^c	0	--	--	na	6.0E+01	--	--	na	6.0E+01	--	--	--	--	--	--	--	--	--	--	na	6.0E+01
N-Nitrosodi-n-propylamine ^c	0	--	--	na	5.1E+00	--	--	na	5.1E+00	--	--	--	--	--	--	--	--	--	--	na	5.1E+00
Nonylphenol	0	2.8E+01	6.6E+00	--	--	2.8E+01	6.6E+00	na	--	--	--	--	--	--	--	--	--	2.8E+01	6.6E+00	na	--
Parathion	0	6.5E-02	1.3E-02	na	--	6.5E-02	1.3E-02	na	--	--	--	--	--	--	--	--	--	6.5E-02	1.3E-02	na	--
PCB Total ^c	0	--	1.4E-02	na	6.4E-04	--	1.4E-02	na	6.4E-04	--	--	--	--	--	--	--	--	--	1.4E-02	na	6.4E-04
Pentachlorophenol ^c	0	8.7E+00	6.7E+00	na	3.0E+01	8.7E+00	6.7E+00	na	3.0E+01	--	--	--	--	--	--	--	--	8.7E+00	6.7E+00	na	3.0E+01
Phenol	0	--	--	na	8.6E+05	--	--	na	8.6E+05	--	--	--	--	--	--	--	--	--	--	na	8.6E+05
Pyrene	0	--	--	na	4.0E+03	--	--	na	4.0E+03	--	--	--	--	--	--	--	--	--	--	na	4.0E+03
Radionuclides	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Gross Alpha Activity (pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Beta and Photon Activity (mem/yr)	0	--	--	na	4.0E+00	--	--	na	4.0E+00	--	--	--	--	--	--	--	--	--	--	na	4.0E+00
Radium 226 + 228 (pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Uranium (ug/l)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			Most Limiting Allocations		
		Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)
Selenium, Total Recoverable	0	2.0E+01	5.0E+00	na	2.0E+01	5.0E+00	na	--	--	--	--	--	--	2.0E+01	5.0E+00	na
Silver	0	1.0E+00	--	na	1.0E+00	--	na	--	--	--	--	--	--	1.0E+00	--	na
Sulfate	0	--	--	na	--	--	na	--	--	--	--	--	--	--	--	na
1,1,2,2-Tetrachloroethane ^c	0	--	--	na	--	--	na	--	--	--	--	--	--	--	--	na
Tetrachloroethylene ^c	0	--	--	na	--	--	na	4.0E+01	--	--	--	--	--	--	--	na
Thallium	0	--	--	na	--	--	na	3.3E+01	--	--	--	--	--	--	--	na
Toluene	0	--	--	na	--	--	na	4.7E-01	--	--	--	--	--	--	--	na
Total dissolved solids	0	--	--	na	--	--	na	6.0E+03	--	--	--	--	--	--	--	na
Toxaphene ^c	0	7.3E-01	2.0E-04	na	7.3E-01	2.0E-04	na	2.8E-03	--	--	--	--	--	7.3E-01	2.0E-04	na
Tributyltin	0	4.6E-01	7.2E-02	na	4.6E-01	7.2E-02	na	--	--	--	--	--	--	4.6E-01	7.2E-02	na
1,2,4-Trichlorobenzene	0	--	--	na	--	--	na	7.0E+01	--	--	--	--	--	--	--	na
1,1,2-Trichloroethane ^c	0	--	--	na	--	--	na	1.6E+02	--	--	--	--	--	--	--	na
Trichloroethylene ^c	0	--	--	na	--	--	na	3.0E+02	--	--	--	--	--	--	--	na
2,4,6-Trichlorophenol ^c	0	--	--	na	--	--	na	2.4E+01	--	--	--	--	--	--	--	na
2-(2,4,5-Trichlorophenoxy)propionic acid (Silvex)	0	--	--	na	--	--	na	--	--	--	--	--	--	--	--	na
Vinyl Chloride ^c	0	--	--	na	--	--	na	2.4E+01	--	--	--	--	--	--	--	na
Zinc	0	6.5E+01	6.6E+01	na	6.5E+01	6.6E+01	na	2.6E+04	--	--	--	--	--	6.5E+01	6.6E+01	na

Notes:

- All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
- Discharge flow is highest monthly average or Form 20 maximum for Industries and design flow for Municipals
- Metals measured as Dissolved, unless specified otherwise
- "C" indicates a carcinogenic parameter
- Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information.
Antidegradation WLAs are based upon a complete mix.
- Antideg. Baseline = (0.25(WQC - background conc.) + background conc.) for acute and chronic
= (0.1(WQC - background conc.) + background conc.) for human health
- WLAs established at the following stream flows: 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens and Harmonic Mean for Carcinogens. To apply mixing ratios from a model set the stream flow equal to (mixing ratio - 1), effluent flow equal to 1 and 100% mix.

Metal	Target Value (SSTV)
Antimony	6.4E+02
Arsenic	9.0E+01
Barium	na
Cadmium	3.9E-01
Chromium III	2.6E+01
Chromium VI	6.4E+00
Copper	2.8E+00
Iron	na
Lead	3.4E+00
Manganese	na
Mercury	4.6E-01
Nickel	6.8E+00
Selenium	3.0E+00
Silver	4.2E-01
Zinc	2.6E+01

Note: do not use QL's lower than the minimum QL's provided in agency guidance

Permit #:VA0027855

Facility:Woodbridge Mobile Home Park STP

Rec'd	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Quantity Unit Lim	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max
12-Jun-2008	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.5	2.2	0.5	2.2
11-Jul-2008	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.4	2.2	0.4	2.2
11-Aug-2008	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.4	2.2	0.4	2.2
10-Sep-2008	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.4	2.2	0.4	2.2
14-Oct-2008	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	1.1	2.2	1.1	2.2
12-Nov-2008	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.6	2.2	0.6	2.2
11-Jun-2009	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.12	2.2	0.12	2.2
13-Jul-2009	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.15	2.2	0.15	2.2
12-Aug-2009	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	<2.04	2.2	3.97	2.2
09-Sep-2009	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.12	2.2	0.12	2.2
10-Oct-2009	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.12	2.2	0.12	2.2
12-Nov-2009	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	<QL	2.2	<QL	2.2
14-Jun-2010	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.2	2.2	0.2	2.2
12-Jul-2010	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.3	2.2	0.3	2.2
11-Aug-2010	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	<QL	2.2	<QL	2.2
13-Sep-2010	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	1	2.2	1	2.2
12-Oct-2010	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	<0.02	2.2	<0.02	2.2
10-Nov-2010	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.44	2.2	0.44	2.2
06-Jun-2011	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	1.8	2.2	1.8	2.2
12-Jul-2011	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	<QL	2.2	<QL	2.2
10-Aug-2011	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.2	2.2	0.2	2.2
09-Sep-2011	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	<QL	2.2	<QL	2.2
12-Oct-2011	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	<QL	2.2	<QL	2.2
14-Nov-2011	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	<QL	2.2	<QL	2.2
11-Jun-2012	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	0.3	2.2	0.3	2.2
11-Jul-2012	AMMONIA, AS N MAY-OCT	NULL	*****	NULL	*****	NULL	NULL	*****	6.8	2.2	6.8	2.2
11-Mar-2008	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	NULL	*****	1.6	3.1	1.6	3.1
14-Apr-2008	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	NULL	*****	6.4	3.1	12.6	3.1
13-May-2008	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	NULL	*****	0.5	3.1	0.5	3.1
11-Dec-2008	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	NULL	*****	1.9	3.1	1.9	3.1
13-Jan-2009	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	NULL	*****	3	3.1	3	3.1
11-Feb-2009	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	NULL	*****	11.3	3.1	11.3	3.1
13-Mar-2009	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	NULL	*****	3.3	3.1	3.3	3.1
13-Apr-2009	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	NULL	*****	3.1	3.1	3.1	3.1
12-May-2009	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	NULL	*****	1.1	3.1	1.1	3.1
10-Dec-2009	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	NULL	*****	<0.10	3.1	<0.10	3.1
12-Jan-2010	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	NULL	*****	0.1	3.1	0.1	3.1

09-Feb-2010	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	5.9	3.1	5.9	3.1
11-Mar-2010	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	1.6	3.1	1.6	3.1
12-Apr-2010	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	2.9	3.1	2.9	3.1
12-May-2010	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<QL	3.1	<QL	3.1
13-Dec-2010	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	1.1	3.1	1.1	3.1
11-Jan-2011	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<0.2	3.1	<0.2	3.1
10-Feb-2011	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	0.3	3.1	0.3	3.1
10-Mar-2011	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<QL	3.1	<QL	3.1
11-Apr-2011	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	1.8	3.1	1.8	3.1
09-May-2011	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<0.2	3.1	<0.2	3.1
12-Dec-2011	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	0.8	3.1	0.8	3.1
11-Jan-2012	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	1.2	3.1	1.2	3.1
08-Feb-2012	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	3.2	3.1	3.2	3.1
12-Mar-2012	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	3.5	3.1	3.5	3.1
11-Apr-2012	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<QL	3.1	<QL	3.1
11-May-2012	AMMONIA, AS N NOV-APR	NULL	*****	NULL	*****	NULL	*****	NULL	*****	0.2	3.1	0.2	3.1
11-Mar-2008	BOD5	0.23	1.7	0.23	2.2	KG/D	*****	NULL	*****	6	20	6	30
14-Apr-2008	BOD5	1.88	1.7	3.69	2.2	KG/D	*****	NULL	*****	11	20	19.9	30
13-May-2008	BOD5	0.23	1.7	0.23	2.2	KG/D	*****	NULL	*****	5	20	5	30
12-Jun-2008	BOD5	0.32	1.7	0.4542	2.2	KG/D	*****	NULL	*****	4.5	20	5	30
11-Jul-2008	BOD5	0.3	1.7	0.3	2.2	KG/D	*****	NULL	*****	4	20	4	30
11-Aug-2008	BOD5	0.23	1.7	0.23	2.2	KG/D	*****	NULL	*****	4	20	4	30
10-Sep-2008	BOD5	0.23	1.7	0.227	2.2	KG/D	*****	NULL	*****	4	20	4	30
14-Oct-2008	BOD5	0.41	1.7	0.41	2.2	KG/D	*****	NULL	*****	6	20	6	30
12-Nov-2008	BOD5	0.32	1.7	0.32	2.2	KG/D	*****	NULL	*****	5	20	5	30
11-Dec-2008	BOD5	0.5	1.7	0.5	2.2	KG/D	*****	NULL	*****	7	20	7	30
13-Jan-2009	BOD5	0.29	1.7	0.29	2.2	KG/D	*****	NULL	*****	7	20	7	30
11-Feb-2009	BOD5	0.34	1.7	0.34	2.2	KG/D	*****	NULL	*****	7	20	7	30
13-Mar-2009	BOD5	0.5	1.7	0.5	2.2	KG/D	*****	NULL	*****	7	20	7	30
13-Apr-2009	BOD5	0.47	1.7	0.47	2.2	KG/D	*****	NULL	*****	5	20	5	30
12-May-2009	BOD5	0.3	1.7	0.3	2.2	KG/D	*****	NULL	*****	6	20	6	30
11-Jun-2009	BOD5	0.24	1.7	0.24	2.2	KG/D	*****	NULL	*****	3.8	20	3.8	30
13-Jul-2009	BOD5	<0.13	1.7	<0.13	2.2	KG/D	*****	NULL	*****	<2	20	<2	30
12-Aug-2009	BOD5	<0.08	1.7	<0.08	2.2	KG/D	*****	NULL	*****	<2	20	<2	30
09-Sep-2009	BOD5	0.73	1.7	0.73	2.2	KG/D	*****	NULL	*****	11.4	20	11.4	30
10-Oct-2009	BOD5	<0.009	1.7	<0.09	2.2	KG/D	*****	NULL	*****	<2	20	<2	30
12-Nov-2009	BOD5	<QL	1.7	<QL	2.2	KG/D	*****	NULL	*****	<QL	20	<QL	30
10-Dec-2009	BOD5	0.35	1.7	0.35	2.2	KG/D	*****	NULL	*****	5.1	20	5.1	30
12-Jan-2010	BOD5	0.2	1.7	0.2	2.2	KG/D	*****	NULL	*****	3.8	20	3.8	30
09-Feb-2010	BOD5	0.45	1.7	0.45	2.2	KG/D	*****	NULL	*****	5.9	20	5.9	30
11-Mar-2010	BOD5	0.77	1.7	0.77	2.2	KG/D	*****	NULL	*****	7	20	7	30
12-Apr-2010	BOD5	0.2	1.7	0.2	2.2	KG/D	*****	NULL	*****	3	20	3	30
12-May-2010	BOD5	<QL	1.7	<QL	2.2	KG/D	*****	NULL	*****	<QL	20	<QL	30

14-Jun-2010	BOD5	0.59	1.7	0.59	2.2	KG/D	NULL	*****	13	20	13	30
12-Jul-2010	BOD5	<0.18	1.7	<0.18	2.2	KG/D	NULL	*****	<2	20	<2	30
11-Aug-2010	BOD5	<QL	1.7	<QL	2.2	KG/D	NULL	*****	<QL	20	<QL	30
13-Sep-2010	BOD5	0.14	1.7	0.14	2.2	KG/D	NULL	*****	2	20	2	30
12-Oct-2010	BOD5	0.8	1.7	0.8	2.2	KG/D	NULL	*****	6	20	6	30
10-Nov-2010	BOD5	0.76	1.7	0.76	2.2	KG/D	NULL	*****	5	20	5	30
13-Dec-2010	BOD5	1.6	1.7	1.6	2.2	KG/D	NULL	*****	9	20	9	30
11-Jan-2011	BOD5	<QL	1.7	<QL	2.2	KG/D	NULL	*****	<QL	20	<QL	30
10-Feb-2011	BOD5	0.47	1.7	0.47	2.2	KG/D	NULL	*****	4	20	4	30
10-Mar-2011	BOD5	0.42	1.7	0.42	2.2	KG/D	NULL	*****	2	20	2	30
11-Apr-2011	BOD5	0.11	1.7	0.11	2.2	KG/D	NULL	*****	4	20	4	30
09-May-2011	BOD5	0.42	1.7	0.42	2.2	KG/D	NULL	*****	8	20	8	30
06-Jun-2011	BOD5	0.17	1.7	0.17	2.2	KG/D	NULL	*****	4	20	4	30
12-Jul-2011	BOD5	<QL	1.7	<QL	2.2	KG/D	NULL	*****	<QL	20	<QL	30
10-Aug-2011	BOD5	0.21	1.7	0.21	2.2	KG/D	NULL	*****	5	20	5	30
09-Sep-2011	BOD5	<QL	1.7	<QL	2.2	KG/D	NULL	*****	<QL	20	<QL	30
12-Oct-2011	BOD5	0.5	1.7	0.5	2.2	KG/D	NULL	*****	12	20	12	30
14-Nov-2011	BOD5	<QL	1.7	<QL	2.2	KG/D	NULL	*****	<QL	20	<QL	30
12-Dec-2011	BOD5	<QL	1.7	<QL	2.2	KG/D	NULL	*****	<QL	20	<QL	30
11-Jan-2012	BOD5	0.15	1.7	0.15	2.2	KG/D	NULL	*****	3	20	3	30
08-Feb-2012	BOD5	0.17	1.7	0.17	2.2	KG/D	NULL	*****	5	20	5	30
12-Mar-2012	BOD5	0.06	1.7	0.06	2.2	KG/D	NULL	*****	2	20	2	30
11-Apr-2012	BOD5	0.32	1.7	0.32	2.2	KG/D	NULL	*****	7	20	7	30
11-May-2012	BOD5	0.14	1.7	0.14	2.2	KG/D	NULL	*****	3	20	3	30
11-Jun-2012	BOD5	0.05	1.7	0.05	2.2	KG/D	NULL	*****	2	20	2	30
11-Jul-2012	BOD5	<QL	1.7	<QL	2.2	KG/D	NULL	*****	<QL	20	<QL	30
11-Mar-2008	PH	NULL	*****	NULL	*****	NULL	6.1	6	NULL	*****	7.3	9
14-Apr-2008	PH	NULL	*****	NULL	*****	NULL	6	6	NULL	*****	7.5	9
13-May-2008	PH	NULL	*****	NULL	*****	NULL	6.06	6	NULL	*****	6.69	9
12-Jun-2008	PH	NULL	*****	NULL	*****	NULL	6.1	6	NULL	*****	7	9
11-Jul-2008	PH	NULL	*****	NULL	*****	NULL	6.1	6	NULL	*****	7.4	9
11-Aug-2008	PH	NULL	*****	NULL	*****	NULL	6.1	6	NULL	*****	7	9
10-Sep-2008	PH	NULL	*****	NULL	*****	NULL	6.1	6	NULL	*****	6.8	9
14-Oct-2008	PH	NULL	*****	NULL	*****	NULL	6.06	6	NULL	*****	7.05	9
12-Nov-2008	PH	NULL	*****	NULL	*****	NULL	6.1	6	NULL	*****	7.1	9
11-Dec-2008	PH	NULL	*****	NULL	*****	NULL	6.1	6	NULL	*****	7.5	9
13-Jan-2009	PH	NULL	*****	NULL	*****	NULL	6.1	6	NULL	*****	7.4	9
11-Feb-2009	PH	NULL	*****	NULL	*****	NULL	6	6	NULL	*****	7.1	9
13-Mar-2009	PH	NULL	*****	NULL	*****	NULL	6.3	6	NULL	*****	6.9	9
13-Apr-2009	PH	NULL	*****	NULL	*****	NULL	6.3	6	NULL	*****	7.2	9
12-May-2009	PH	NULL	*****	NULL	*****	NULL	6.27	6	NULL	*****	7.13	9
11-Jun-2009	PH	NULL	*****	NULL	*****	NULL	6.2	6	NULL	*****	7	9
13-Jul-2009	PH	NULL	*****	NULL	*****	NULL	6.2	6	NULL	*****	7.4	9

12-Aug-2009	PH		*****	NULL	*****	NULL	7.2	6	NULL	*****	7.9	9
09-Sep-2009	PH		*****	NULL	*****	NULL	6.9	6	NULL	*****	7.8	9
10-Oct-2009	PH		*****	NULL	*****	NULL	7.1	6	NULL	*****	7.9	9
12-Nov-2009	PH		*****	NULL	*****	NULL	6.7	6	NULL	*****	8.5	9
10-Dec-2009	PH		*****	NULL	*****	NULL	6.18	6	NULL	*****	7.42	9
12-Jan-2010	PH		*****	NULL	*****	NULL	6	6	NULL	*****	7.1	9
09-Feb-2010	PH		*****	NULL	*****	NULL	6.3	6	NULL	*****	7.1	9
11-Mar-2010	PH		*****	NULL	*****	NULL	6.7	6	NULL	*****	7.2	9
12-Apr-2010	PH		*****	NULL	*****	NULL	6.1	6	NULL	*****	7.4	9
12-May-2010	PH		*****	NULL	*****	NULL	6.6	6	NULL	*****	7.5	9
14-Jun-2010	PH		*****	NULL	*****	NULL	6.1	6	NULL	*****	7.5	9
12-Jul-2010	PH		*****	NULL	*****	NULL	6.4	6	NULL	*****	7.3	9
11-Aug-2010	PH		*****	NULL	*****	NULL	6.7	6	NULL	*****	7.4	9
13-Sep-2010	PH		*****	NULL	*****	NULL	6.6	6	NULL	*****	7.4	9
12-Oct-2010	PH		*****	NULL	*****	NULL	6	6	NULL	*****	7.2	9
10-Nov-2010	PH		*****	NULL	*****	NULL	6.2	6	NULL	*****	7.4	9
13-Dec-2010	PH		*****	NULL	*****	NULL	6.5	6	NULL	*****	8	9
11-Jan-2011	PH		*****	NULL	*****	NULL	6.5	6	NULL	*****	7.6	9
10-Feb-2011	PH		*****	NULL	*****	NULL	6.4	6	NULL	*****	7.4	9
10-Mar-2011	PH		*****	NULL	*****	NULL	6.6	6	NULL	*****	7.2	9
11-Apr-2011	PH		*****	NULL	*****	NULL	6.4	6	NULL	*****	7.2	9
09-May-2011	PH		*****	NULL	*****	NULL	6.9	6	NULL	*****	7.5	9
06-Jun-2011	PH		*****	NULL	*****	NULL	6.9	6	NULL	*****	7.3	9
12-Jul-2011	PH		*****	NULL	*****	NULL	730	6	NULL	*****	7.7	9
10-Aug-2011	PH		*****	NULL	*****	NULL	6.8	6	NULL	*****	7.4	9
09-Sep-2011	PH		*****	NULL	*****	NULL	6.5	6	NULL	*****	7.1	9
12-Oct-2011	PH		*****	NULL	*****	NULL	6.5	6	NULL	*****	7.3	9
14-Nov-2011	PH		*****	NULL	*****	NULL	6.4	6	NULL	*****	7.3	9
12-Dec-2011	PH		*****	NULL	*****	NULL	6.6	6	NULL	*****	7.4	9
11-Jan-2012	PH		*****	NULL	*****	NULL	6.7	6	NULL	*****	7.3	9
08-Feb-2012	PH		*****	NULL	*****	NULL	6.5	6	NULL	*****	7.4	9
12-Mar-2012	PH		*****	NULL	*****	NULL	6.7	6	NULL	*****	7.3	9
11-Apr-2012	PH		*****	NULL	*****	NULL	6.8	6	NULL	*****	7.4	9
11-May-2012	PH		*****	NULL	*****	NULL	6.3	6	NULL	*****	7.5	9
11-Jun-2012	PH		*****	NULL	*****	NULL	6.3	6	NULL	*****	6.9	9
11-Jul-2012	PH		*****	NULL	*****	NULL	6.5	6	NULL	*****	7.2	9
										90th	7.7	
										10th	7	
11-Mar-2008	TEMPERATURE, WATER (DEG. C)		*****	NULL	*****	NULL	8	NL	NULL	*****	12.8	NL
14-Apr-2008	TEMPERATURE, WATER (DEG. C)		*****	NULL	*****	NULL	10	NL	NULL	*****	14	NL
13-May-2008	TEMPERATURE, WATER (DEG. C)		*****	NULL	*****	NULL	13	NL	NULL	*****	19	NL

12-Jun-2008	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	16	NL	NULL	*****	21	NL
11-Jul-2008	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	21	NL	NULL	*****	24	NL
11-Aug-2008	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	23	NL	NULL	*****	25	NL
10-Sep-2008	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	23	NL	NULL	*****	25	NL
14-Oct-2008	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	19.5	NL	NULL	*****	23.7	NL
12-Nov-2008	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	12.5	NL	NULL	*****	19.9	NL
11-Dec-2008	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	6	NL	NULL	*****	15	NL
13-Jan-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	6	NL	NULL	*****	15	NL
11-Feb-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	2	NL	NULL	*****	13	NL
13-Mar-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	4.7	NL	NULL	*****	12.5	NL
13-Apr-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	6	NL	NULL	*****	13	NL
12-May-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	9.9	NL	NULL	*****	17.4	NL
11-Jun-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	13	NL	NULL	*****	20	NL
13-Jul-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	20	NL	NULL	*****	24	NL
12-Aug-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	22	NL	NULL	*****	25	NL
09-Sep-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	23	NL	NULL	*****	25	NL
10-Oct-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	19.7	NL	NULL	*****	24	NL
12-Nov-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	15	NL	NULL	*****	22	NL
10-Dec-2009	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	13.1	NL	NULL	*****	21.6	NL
12-Jan-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	6	NL	NULL	*****	15	NL
09-Feb-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	4	NL	NULL	*****	9	NL
11-Mar-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	5	NL	NULL	*****	8	NL
12-Apr-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	7	NL	NULL	*****	14	NL
12-May-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	14	NL	NULL	*****	17	NL
14-Jun-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	18	NL	NULL	*****	23	NL
12-Jul-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	22	NL	NULL	*****	26	NL
11-Aug-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	22	NL	NULL	*****	26	NL
13-Sep-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	21	NL	NULL	*****	26	NL
12-Oct-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	20	NL	NULL	*****	23	NL
10-Nov-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	16	NL	NULL	*****	20	NL
13-Dec-2010	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	13	NL	NULL	*****	16	NL
11-Jan-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	9	NL	NULL	*****	14	NL
10-Feb-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	8	NL	NULL	*****	12	NL
10-Mar-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	10	NL	NULL	*****	14	NL
11-Apr-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	10	NL	NULL	*****	14	NL
09-May-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	13	NL	NULL	*****	20	NL
06-Jun-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	17	NL	NULL	*****	23	NL
12-Jul-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	22	NL	NULL	*****	25	NL
10-Aug-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	24	NL	NULL	*****	27	NL
09-Sep-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	22	NL	NULL	*****	26	NL
12-Oct-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	20	NL	NULL	*****	24	NL
14-Nov-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	14	NL	NULL	*****	21	NL
12-Dec-2011	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	14	NL	NULL	*****	17	NL

11-Jan-2012	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	12	NL	NULL	*****	15	NL
08-Feb-2012	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	9	NL	NULL	*****	13	NL
12-Mar-2012	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	9	NL	NULL	*****	13	NL
11-Apr-2012	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	7	NL	NULL	*****	9	NL
11-May-2012	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	15	NL	NULL	*****	19	NL
11-Jun-2012	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	17	NL	NULL	*****	23	NL
11-Jul-2012	TEMPERATURE, WATER (DEG. C)	NULL	*****	NULL	*****	NULL	22	NL	NULL	*****	27	NL
11-Mar-2008	TSS	0.1	1.7	0.1	2.2	2.2	KG/D	NULL	2.6	20	2.6	30
14-Apr-2008	TSS	3.58	1.7	7.07	2.2	2.2	KG/D	NULL	20.3	20	38.1	30
13-May-2008	TSS	0.17	1.7	0.17	2.2	2.2	KG/D	NULL	3.8	20	3.8	30
12-Jun-2008	TSS	0.38	1.7	0.6359	2.2	2.2	KG/D	NULL	4.5	20	5.6	30
11-Jul-2008	TSS	0.36	1.7	0.36	2.2	2.2	KG/D	NULL	4.8	20	4.8	30
11-Aug-2008	TSS	0.27	1.7	0.27	2.2	2.2	KG/D	NULL	4.8	20	4.8	30
10-Sep-2008	TSS	0.32	1.7	0.324	2.2	2.2	KG/D	NULL	5.7	20	5.7	30
14-Oct-2008	TSS	0.46	1.7	0.46	2.2	2.2	KG/D	NULL	7.2	20	7.2	30
12-Nov-2008	TSS	0.44	1.7	0.44	2.2	2.2	KG/D	NULL	6.9	20	6.9	30
11-Dec-2008	TSS	0.49	1.7	0.49	2.2	2.2	KG/D	NULL	6.8	20	6.8	30
13-Jan-2009	TSS	0.28	1.7	0.28	2.2	2.2	KG/D	NULL	6.7	20	6.7	30
11-Feb-2009	TSS	0.32	1.7	0.32	2.2	2.2	KG/D	NULL	6.6	20	6.6	30
13-Mar-2009	TSS	0.41	1.7	0.41	2.2	2.2	KG/D	NULL	5.7	20	5.7	30
13-Apr-2009	TSS	0.73	1.7	0.73	2.2	2.2	KG/D	NULL	7.7	20	7.7	30
12-May-2009	TSS	0.32	1.7	0.32	2.2	2.2	KG/D	NULL	6.4	20	6.4	30
11-Jun-2009	TSS	0.11	1.7	0.11	2.2	2.2	KG/D	NULL	1.7	20	1.7	30
13-Jul-2009	TSS	0.17	1.7	0.17	2.2	2.2	KG/D	NULL	2.7	20	2.7	30
12-Aug-2009	TSS	<0.04	1.7	<0.04	2.2	2.2	KG/D	NULL	<1	20	<1	30
09-Sep-2009	TSS	0.12	1.7	0.12	2.2	2.2	KG/D	NULL	1.8	20	1.8	30
10-Oct-2009	TSS	0.05	1.7	0.05	2.2	2.2	KG/D	NULL	1	20	1	30
12-Nov-2009	TSS	0.06	1.7	0.06	2.2	2.2	KG/D	NULL	1.5	20	1.5	30
10-Dec-2009	TSS	0.08	1.7	0.08	2.2	2.2	KG/D	NULL	1.2	20	1.2	30
12-Jan-2010	TSS	0.1	1.7	0.1	2.2	2.2	KG/D	NULL	1.8	20	1.8	30
09-Feb-2010	TSS	0.54	1.7	0.54	2.2	2.2	KG/D	NULL	7.1	20	7.1	30
11-Mar-2010	TSS	0.44	1.7	0.44	2.2	2.2	KG/D	NULL	4	20	4	30
12-Apr-2010	TSS	0.1	1.7	0.1	2.2	2.2	KG/D	NULL	1.4	20	1.4	30
12-May-2010	TSS	<QL	1.7	<QL	2.2	2.2	KG/D	NULL	<QL	20	<QL	30
14-Jun-2010	TSS	0.45	1.7	0.45	2.2	2.2	KG/D	NULL	10	20	10	30
12-Jul-2010	TSS	0.21	1.7	0.21	2.2	2.2	KG/D	NULL	2.4	20	2.4	30
11-Aug-2010	TSS	<QL	1.7	<QL	2.2	2.2	KG/D	NULL	<QL	20	<QL	30
13-Sep-2010	TSS	0.12	1.7	0.12	2.2	2.2	KG/D	NULL	1.8	20	1.8	30
12-Oct-2010	TSS	1.7	1.7	1.7	2.2	2.2	KG/D	NULL	13	20	13	30
10-Nov-2010	TSS	0.65	1.7	0.65	2.2	2.2	KG/D	NULL	4.3	20	4.3	30
13-Dec-2010	TSS	1.9	1.7	3.7	2.2	2.2	KG/D	NULL	11.5	20	21	30
11-Jan-2011	TSS	0.15	1.7	0.15	2.2	2.2	KG/D	NULL	1.5	20	1.5	30
10-Feb-2011	TSS	1.76	1.7	1.76	2.2	2.2	KG/D	NULL	15	20	15	30

10-Mar-2011	TSS		0.62	1.7	0.62	2.2	KG/D	NULL	*****	2.9	20	2.9	30
11-Apr-2011	TSS		0.1	1.7	0.1	2.2	KG/D	NULL	*****	3.7	20	3.7	30
09-May-2011	TSS		0.3	1.7	0.3	2.2	KG/D	NULL	*****	5.7	20	5.7	30
06-Jun-2011	TSS		0.11	1.7	0.11	2.2	KG/D	NULL	*****	2.6	20	2.6	30
12-Jul-2011	TSS		<QL	1.7	<QL	2.2	KG/D	NULL	*****	<QL	20	<QL	30
10-Aug-2011	TSS		0.2	1.7	0.2	2.2	KG/D	NULL	*****	4.7	20	4.7	30
09-Sep-2011	TSS		<QL	1.7	<QL	2.2	KG/D	NULL	*****	<QL	20	<QL	30
12-Oct-2011	TSS		0.36	1.7	0.36	2.2	KG/D	NULL	*****	8.7	20	8.7	30
14-Nov-2011	TSS		0.1	1.7	0.1	2.2	KG/D	NULL	*****	1.6	20	1.6	30
12-Dec-2011	TSS		<QL	1.7	<QL	2.2	KG/D	NULL	*****	<QL	20	<QL	30
11-Jan-2012	TSS		0.09	1.7	0.09	2.2	KG/D	NULL	*****	1.8	20	1.8	30
08-Feb-2012	TSS		0.19	1.7	0.19	2.2	KG/D	NULL	*****	5.5	20	5.5	30
12-Mar-2012	TSS		0.07	1.7	0.07	2.2	KG/D	NULL	*****	2.3	20	2.3	30
11-Apr-2012	TSS		0.38	1.7	0.38	2.2	KG/D	NULL	*****	8.3	20	8.3	30
11-May-2012	TSS		0.1	1.7	0.1	2.2	KG/D	NULL	*****	2.3	20	2.3	30
11-Jun-2012	TSS		0.05	1.7	0.05	2.2	KG/D	NULL	*****	2	20	2	30
11-Jul-2012	TSS		0.14	1.7	0.14	2.2	KG/D	NULL	*****	2.9	20	2.9	30

VA0027855 Effluent Temperature Data

Winter

11-Mar-2008	TEMPERATURE, WATER (DEG. C)	8	
14-Apr-2008	TEMPERATURE, WATER (DEG. C)	10	
13-May-2008	TEMPERATURE, WATER (DEG. C)	13	19
11-Dec-2008	TEMPERATURE, WATER (DEG. C)	6	15
13-Jan-2009	TEMPERATURE, WATER (DEG. C)	6	15
11-Feb-2009	TEMPERATURE, WATER (DEG. C)	2	13
13-Mar-2009	TEMPERATURE, WATER (DEG. C)	4.7	12.5
13-Apr-2009	TEMPERATURE, WATER (DEG. C)	6	13
12-May-2009	TEMPERATURE, WATER (DEG. C)	9.9	17.4
10-Dec-2009	TEMPERATURE, WATER (DEG. C)	13.1	21.6
12-Jan-2010	TEMPERATURE, WATER (DEG. C)	6	15
09-Feb-2010	TEMPERATURE, WATER (DEG. C)	4	9
11-Mar-2010	TEMPERATURE, WATER (DEG. C)	5	8
12-Apr-2010	TEMPERATURE, WATER (DEG. C)	7	14
12-May-2010	TEMPERATURE, WATER (DEG. C)	14	17
13-Dec-2010	TEMPERATURE, WATER (DEG. C)	13	16
11-Jan-2011	TEMPERATURE, WATER (DEG. C)	9	14
10-Feb-2011	TEMPERATURE, WATER (DEG. C)	8	12
10-Mar-2011	TEMPERATURE, WATER (DEG. C)	10	14
11-Apr-2011	TEMPERATURE, WATER (DEG. C)	10	14
09-May-2011	TEMPERATURE, WATER (DEG. C)	13	20
12-Dec-2011	TEMPERATURE, WATER (DEG. C)	14	17
11-Jan-2012	TEMPERATURE, WATER (DEG. C)	12	15
08-Feb-2012	TEMPERATURE, WATER (DEG. C)	9	13
12-Mar-2012	TEMPERATURE, WATER (DEG. C)	9	13
11-Apr-2012	TEMPERATURE, WATER (DEG. C)	7	9

90th 13.05

Summer

12-Jun-2008	TEMPERATURE, WATER (DEG. C)	16	21
11-Jul-2008	TEMPERATURE, WATER (DEG. C)	21	24
11-Aug-2008	TEMPERATURE, WATER (DEG. C)	23	25
10-Sep-2008	TEMPERATURE, WATER (DEG. C)	23	25
14-Oct-2008	TEMPERATURE, WATER (DEG. C)	19.5	23.7
12-Nov-2008	TEMPERATURE, WATER (DEG. C)	12.5	19.9
11-Jun-2009	TEMPERATURE, WATER (DEG. C)	13	20
13-Jul-2009	TEMPERATURE, WATER (DEG. C)	20	24
12-Aug-2009	TEMPERATURE, WATER (DEG. C)	22	25
09-Sep-2009	TEMPERATURE, WATER (DEG. C)	23	25
10-Oct-2009	TEMPERATURE, WATER (DEG. C)	19.7	24
12-Nov-2009	TEMPERATURE, WATER (DEG. C)	15	22
14-Jun-2010	TEMPERATURE, WATER (DEG. C)	18	23
12-Jul-2010	TEMPERATURE, WATER (DEG. C)	22	26
11-Aug-2010	TEMPERATURE, WATER (DEG. C)	22	26
13-Sep-2010	TEMPERATURE, WATER (DEG. C)	21	26
12-Oct-2010	TEMPERATURE, WATER (DEG. C)	20	23
10-Nov-2010	TEMPERATURE, WATER (DEG. C)	16	20
06-Jun-2011	TEMPERATURE, WATER (DEG. C)	17	23
12-Jul-2011	TEMPERATURE, WATER (DEG. C)	22	25
10-Aug-2011	TEMPERATURE, WATER (DEG. C)	24	27
09-Sep-2011	TEMPERATURE, WATER (DEG. C)	22	26
12-Oct-2011	TEMPERATURE, WATER (DEG. C)	20	24
14-Nov-2011	TEMPERATURE, WATER (DEG. C)	14	21
11-Jun-2012	TEMPERATURE, WATER (DEG. C)	17	23
11-Jul-2012	TEMPERATURE, WATER (DEG. C)	22	27

7/24/2012 10:36:28 AM

Facility = Woodbridge Mobile Home Park

Chemical = Ammonia (May - Oct)

Chronic averaging period = 30

WLAa = 14.4

WLAc = 2.1

Q.L. = 0.1

samples/mo. = 1

samples/wk. = 1

Summary of Statistics:

observations = 1

Expected Value = 9

Variance = 29.16

C.V. = 0.6

97th percentile daily values = 21.9007

97th percentile 4 day average = 14.9741

97th percentile 30 day average = 10.8544

< Q.L. = 0

Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity

Maximum Daily Limit = 4.23710719617425

Average Weekly limit = 4.23710719617425

Average Monthly Limit = 4.23710719617425

The data are:

7/24/2012 10:37:18 AM

Facility = Woodbridge Mobile Home Park

Chemical = Ammonia (Nov - Apr)

Chronic averaging period = 30

WLAa = 14.4

WLAc = 3.6

Q.L. = 0.1

samples/mo. = 1

samples/wk. = 1

Summary of Statistics:

observations = 1

Expected Value = 9

Variance = 29.16

C.V. = 0.6

97th percentile daily values = 21.9007

97th percentile 4 day average = 14.9741

97th percentile 30 day average = 10.8544

< Q.L. = 0

Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity

Maximum Daily Limit = 7.26361233629872

Average Weekly limit = 7.26361233629872

Average Monthly Limit = 7.26361233629872

The data are:

Analysis of the Gleaton' (Winter Tier) effluent data for Ammonia *NOV-APR*

The statistics for Ammonia are:

Number of values	=	1
Quantification level	=	.2
Number < quantification	=	0
Expected value	=	10
Variance	=	36.00001
C.V.	=	.6
97th percentile	=	24.33418
Statistics used	=	Reasonable potential assumptions - Type 2 data

The WLAs for Ammonia are:

Acute WLA	=	12.37
Chronic WLA	=	2.13
Human Health WLA	=	----

The limits are based on chronic toxicity and 1 samples/month.

Maximum daily limit	=	3.115285
Average monthly limit	=	3.115285 = <i>3.1 mg/l</i>

DATA

10

FACILITY NOT DESIGNED TO NITRIFY

Analysis of the Gleaton'. (Summer Tier) effluent dat for Ammonia *MAY-OCT*

The statistics for Ammonia are:

Number of values	=	1
Quantification level	=	.2
Number < quantification	=	0
Expected value	=	10
Variance	=	36.00001
C.V.	=	.6
97th percentile	=	24.33418
Statistics used	=	Reasonable potential assumptions - Type 2 data

The WLAs for Ammonia are:

Acute WLA	=	11.93
Chronic WLA	=	1.49
Human Health WLA	=	----

The limits are based on chronic toxicity and 1 samples/month.

Maximum daily limit	=	2.179237
Average monthly limit	=	2.179237 = <i>2.2 mg/l</i>

DATA

10

FACILITY NOT DESIGNED TO NITRIFY

MEMORANDUM

State Water Control Board

2111 North Hamilton Street

P. O. Box 11143

Richmond, VA. 23230

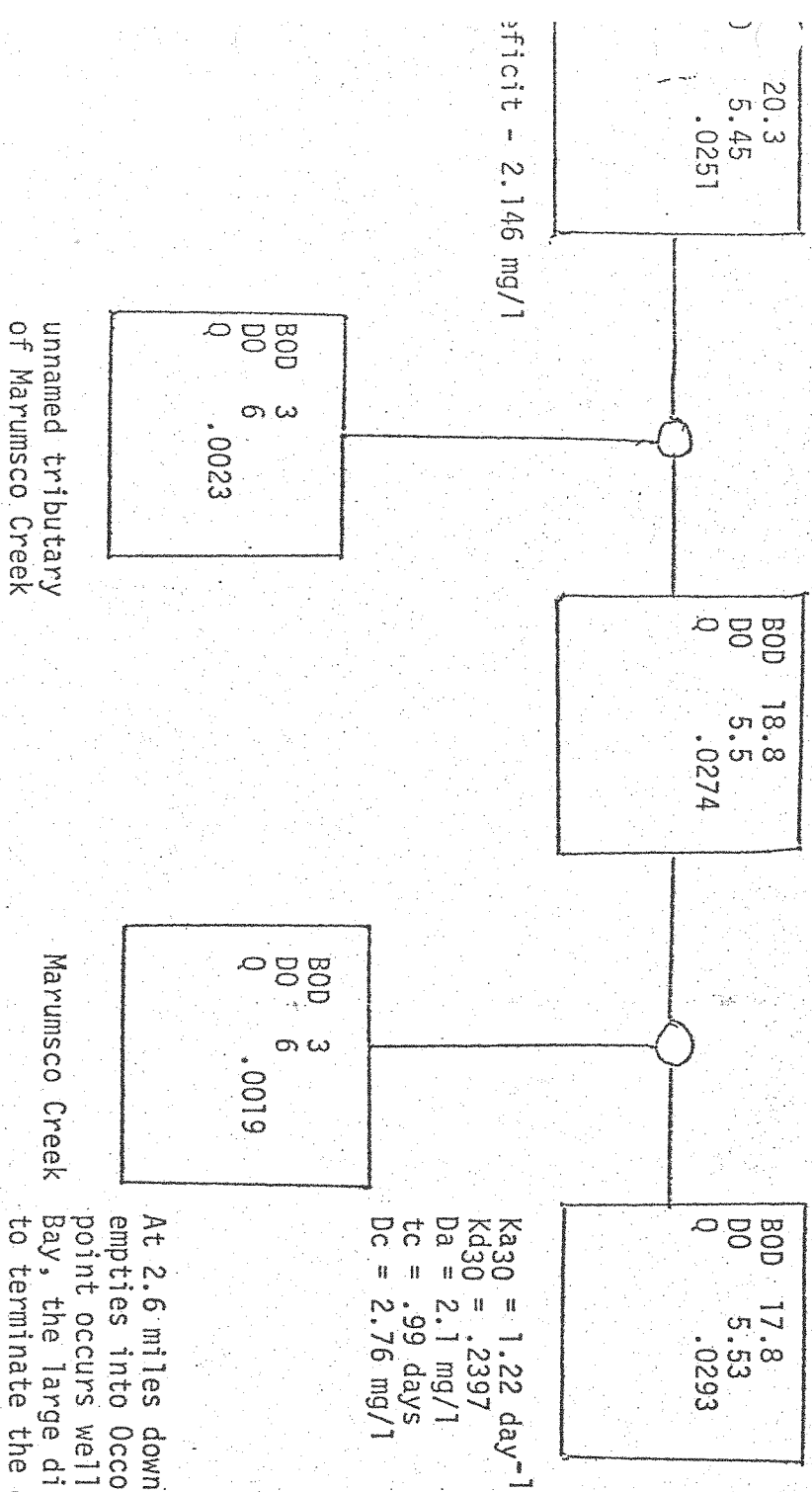
SUBJECT: Prince William County - Gleaton's Mobile
Home Park - VA0027855 - NPDES - SAA
TO: George Whitaker - BAT
FROM: Mary B. Schwenn - NRO
DATE: August 8, 1974
COPIES: Al Pollock (BAT), John Hopkins (NRO)

POT. BASIN

Quads used: Occoquan, Fort Belvoir
Plant Flow = .0198 MGD
Critical discharge = .018 (Occoquan Creek near Occoquan)

20 mg/l BOD₅ and 6.0 mg/l D.O. in effluent meet stream standards in the intermittent stream and in Marumsco Creek.

MBS/by



At 2.6 miles downstream, the Marumisco Creek empties into Occoquan Bay. Since the critical point occurs well after discharge into the Bay, the large dilution factor makes it possible to terminate the analysis here.

PRINCE WILLIAM COUNTY - GLEATON'S MOBILE HOME PARK
NPDES - SAA - August 8, 1974

based on effluent BOD₅
of 20 mg/l

BOD	26
D0	6.0
Q	.0198

$x = .6$ mi
 $v = .4$ ft/sec
 $t = .091$ day

BOD	25.3
D0	5.51
Q	.0198

deficit = 2.09 mg/l

BOD	3
D0	6
Q	.0053

Drainage above
Discharge

BOD	20.6
D0	5.61
Q	.0251

$x = .4$ mi
 $v = .4$ ft/sec
 $t = .061$ day

Park discharge
 $Ka_{30} = 1.0$ day⁻¹
 $Kd_{30} = .2789$ day⁻¹
 $Da = 1.6$ mg/l
 $tc = 1.53$ days
 $Dc = 4.73$ mg/l

$Ka_{30} = 1.22$ day⁻¹
 $Kd_{30} = .2486$ day⁻¹
 $Da = 1.99$ mg/l
 $tc = 1.15$ days
 $Dc = 3.15$ mg/l

STATE WATER CONTROL BOARD
NRO

SUBJECT: CHLORINE MASS BALANCE: Electron's Mobile Home Park /
Primer William Co.
TO: PERMIT FILE
FROM: HC
DATE: 3-2-87
COPIES:

The effluent is discharged to Marengo Creek.
The Q7-10 for this stream is 0 MGD. The wastewater
treatment plant design flow is 0.020 MGD.

*The allowable
Cl₂ discharge
value

$$= \frac{(0.020 + 0.0053)(0.011 \text{ mg/l})}{(0.020)}$$
$$= 0.014 \text{ mg/l}$$

ADDITIONAL
INFORMATION

Q710 of zero for this stream section from 8-8-74 model.
Distance of 0 flow input = .6 mi, $v = .4 \text{ ft/sec}$, $T = .091 \text{ day}$
Q7-10 of upstream convergence = 0.0053 MGD

Decay $0.014 = C_0 e^{-(1)(.091)}$
 $.913 C_0 = .014$
 $C_0 = .015$

0.015

A. Alternative disinfection or dechlorination to
mg/l must be provided.

B. No dechlorination is required.

* Use decay calculation if the discharge is to a dry ditch.

Public Notice – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of treated wastewater into a water body in Prince William County, Virginia.

PUBLIC COMMENT PERIOD: December 6, 2012 to 5:00 p.m. on January 7, 2013

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit – Wastewater issued by DEQ, under the authority of the State Water Control Board

APPLICANT NAME, ADDRESS AND PERMIT NUMBER: Bradley Dressler – President, Woodbridge, Inc.
49 SW Flagler Ave., Suite 201, Stuart, FL 34994
VA0027855

NAME AND ADDRESS OF FACILITY: Woodbridge Mobile Home Park Sewage Treatment Plant
13145 Minnieville Road, Woodbridge, VA 22192

PROJECT DESCRIPTION: Bradley Dressler has applied for a reissuance of a permit for the private Woodbridge Mobile Home Park STP. The applicant proposes to release treated sewage wastewaters from residential areas at a rate of 0.0198 million gallons per day into a water body. Sludge from the treatment process will be transported to the Massaponax WWTP (VA0025658) for further treatment and disposal. The facility proposes to release the treated sewage in the Marumsco Creek in Prince William County in the Potomac River watershed. A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: pH, Biochemical Oxygen Demand, Total Suspended Solids, Dissolved Oxygen, Ammonia as N and E. coli.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: The public may review the documents at the DEQ-Northern Regional Office by appointment, or may request electronic copies of the draft permit and fact sheet.

Name: Douglas Frasier
Address: DEQ-Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193
Phone: 703-583-3873 Email: Douglas.Frasier@deq.virginia.gov Fax: 703-583-3821



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193

(703) 583-3800 Fax (703) 583-3821

www.deq.virginia.gov

L. Preston Bryant, Jr
Secretary of Natural Resources

David K. Paylor
Director

CASE TERMINATION/DEREFERRAL MEMORANDUM

TO: File

FROM: Stephanie Bellotti, Regional Enforcement Specialist, Senior

DATE: 4/17/2009

COPY: Wilamena Harback - Compliance Inspector
Susan Oakes- Permit Writer

RE: Woodbridge Mobile Home Park Sewage Treatment Plant

[X] Permitted Facility VPDES Permit No. VA0027855

Referral Date: 12/15/2005

Location and/or Address: Prince William County, Virginia

Reason for TERMINATION/DEREFERRAL:

☐ Compliance achieved through informal action.

☒ Consent Order Terminated.

☐ Referral. Referred to:

Contact:

Phone:

The Special Order by Consent (Consent Order) issued to the Woodbridge Mobile Home Park, LLC for the Woodbridge Mobile Home Park Sewage Treatment Plant (STP) on December 18, 2006, addressed violations of the State Water Control Law and Regulations. Specifically, the Order addressed permit effluent violations experienced at the STP for Fecal Coliform, Ammonia as Nitrogen, Bichomeical Oxygen Demand, and Total Suspended Solids. The December 18, 2006 Consent Order laid out a timeline for the closure of the existing STP, and the construction of a new, upgraded STP.

From the effective date of the Consent Order through March of 2007, the STP continued to experience permit effluent violations. In mid March of 2007, a new operator was hired to handle operations at the STP. The STP experienced Ammonia and TSS exceedances in March due to a lack of biomass in the aeration basin and a need to reseed the plant. Following this period of conversion from the old operator to the new operator, the STP has experienced a significant decrease in permit effluent violations.

DEQ received a letter from the owner of the STP on March 7, 2008, stating that the Facility would be hooking up to public sewer instead of constructing a new STP, and would be able to meet the deadlines set forth in the Consent Order. On March 11, 2008, DEQ received a letter explaining that the Facility had, in good faith, tried to comply with the new terms of the Consent Order, however due to financial constraints and the current economic situation, hooking up to public sewer was no longer an option.


Following the March 11, 2008 letter, the Facility owner informed DEQ that hooking up to public sewer might still be an option, provided he could finance the project. In a letter received by DEQ on July 14, 2008, the Facility owner stated that he was in the process of trying to refinance other properties to raise the estimated one million dollars it would take to hook up Phase I of the project, consisting of 67 units, to public sewer. The letter also explained that since Phase II of the trailer park, consisting of the remaining 28 units, was considered legally non conforming by Prince William County, and therefore would not be hooked up to public sewer. On September 16, 2008, DEQ received an email from the Facility owner stating that hooking up to public sewer was no longer an option due to financial constraints and the current downturn in the economy.

The December 18, 2006 Consent Order was entered into by DEQ and Woodbridge Mobile Home Park for the purpose of resolving permit effluent violations at the STP. While the Facility has not completed the items in the Consent Order, the Facility has taken steps to significantly reduce the occurrence of consistent effluent violations at the STP, and has therefore satisfied the intent of the Consent Order. Since the Facility owner hired a new operator in mid March 2007, operations at the Plant have greatly improved, and the occurrence of permit effluent violations has significantly decreased. Since April of 2007, the month following the start of the new operator's hiring, the facility has experienced TSS, BOD₅, and Ammonia violations in March of 2008 due to a high rainfall event. The Facility also experienced an E.coli violation in November 2008. The operator promptly changed the lamps in one of the UV banks, and the Facility has not experienced any E.coli excursions since this incident. The Facility experienced Ammonia violations in January and February of 2009. These ammonia violations are typical during cold weather months at sewage treatment plants. In addition, the Facility owner has made the changes necessary to the STP to meet Class I Reliability, in accordance with their permit. Class I Reliability was confirmed by a DEQ inspection conducted on December 19, 2008.

Finally the civil charge was assessed at \$5,500.00, and was paid and deposited by DEQ on February 21, 2007. Thus, Woodbridge Mobile Home Park has satisfied the intent of the December 18, 2006 Consent Order, and DEQ has determined that a termination of the December 18, 2006 Consent Order is appropriate.

Terminated/Dereferred: 5/20/2009

Recommended by: Stephanie Bellotti, Regional Enforcement Specialist SAB


Thomas A. Grate
Regional Director
4-20-09
Date


Michael Baker
Regional Enforcement Manager
4/17/09
Date



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

L. Preston Bryant, Jr.
Secretary of Natural Resources

NORTHERN VIRGINIA REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800 Fax (703) 583-3801
www.deq.virginia.gov

David K. Paylor
Director

Jeffery A. Steers
Regional Director

STATE WATER CONTROL BOARD ENFORCEMENT ACTION

SPECIAL ORDER BY CONSENT

ISSUED TO THE

WOODBIDGE MHP, LLC

FOR THE

WOODBIDGE MOBILE HOME PARK SEWAGE TREATMENT PLANT (VPDES PERMIT NO. VA0027855)

SECTION A: Purpose

This is a Consent Special Order issued under the authority of Va. Code § 62.1-44.15(8a) and (8d) and 10.1-1185 between the State Water Control Board and Woodbridge MHP, LLC regarding the Woodbridge Mobile Home Park Sewage Treatment Plant for the purpose of resolving certain violations of the State Water Control Law and Regulations.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "Va. Code" means the Code of Virginia (1950), as amended.
2. "Board" means the State Water Control Board, a permanent citizens' board of the Commonwealth of Virginia as described in Va. Code § 62.1-44.7 and 10.1-1184.

3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia as described in Va. Code § 10.1-1183.
4. "Director" means the Director of the Department of Environmental Quality.
5. "Order" means this document, also known as a Consent Special Order.
6. "STP" means the Woodbridge Mobile Home Park Sewage Treatment Plant located in Prince William County, Virginia.
7. "Regulation" means 9 VAC 25-31-10 *et seq.*, the Virginia Pollutant Discharge Elimination System Permit Regulation.
8. "Permit" means the Virginia Pollutant Discharge Elimination System (VPDES) Permit No. VA0027855.
9. "NVRO" means the Northern Virginia Regional Office of DEQ, located in Woodbridge, Virginia.

SECTION C: Finding of Fact and Conclusions of Law

1. Woodbridge MHP, LLC ("Woodbridge") owns the STP, which is a 0.0198 MGD sewage treatment plant that treats wastewater from the approximately 98 units in a mobile home park. The STP discharges to an unnamed tributary of Marumsco Creek, which is located within the Potomac and Shenandoah River Basin. Discharges from the STP are the subject of the Permit.
2. The Board has evidence to indicate that Woodbridge has violated the Regulation and the Permit by: (1) exceeding Permit effluent limits for Fecal Coliform, Ammonia as Nitrogen, Biochemical Oxygen Demand, and Total Suspended Solids; and (2) submitting financial assurance documentation late. DEQ NVRO issued four notices of violation (NOV) to Woodbridge for the above-referenced violations as follows: NOV No. W2005-12-N-0004 issued December 12, 2005; NOV No. W2006-03-N-0006 issued March 10, 2006; NOV No. W2006-05-N-0003 issued May 10, 2006 and NOV No. W2006-06-N-0003 issued June 7, 2006.
3. The STP is an antiquated activated sludge plant that is near its design capacity with the current flow it receives. With the influent flow being at a high level the performance of the STP is affected by any amount of inflow and infiltration (I/I) that occurs within the collection system. During heavy rainfall events the influent flow usually surges at the STP causing plant upsets that result in solids loss and unusual discharges to the receiving stream.

4. The STP is operated by Environmental Systems Service, Ltd. ("ESS"). As required by the Permit, during these unusual discharge events ESS collects samples of the effluent and reports the data on the monthly Discharge Monitoring Report (DMR) submissions. ESS also reports these events to DEQ orally and in writing within the required time period. All of the effluent limit violations cited above are a result of sampling from these unusual discharge events.
5. As a result of the noncompliance issues with the STP and the water treatment system at the mobile home park, Woodbridge has been exploring its alternatives to return to compliance since the winter of 2005-2006. Woodbridge asserts it can: (1) complete a major upgrade of the existing STP and collection system to accommodate fewer units (approximately 68); (2) expand the mobile home park to 131 units and hook up to Prince William County Service Authority ("PWCSA") and take the existing STP offline; (3) expand the mobile home park to 131 units and construct a new sewage treatment plant; or (4) close the mobile home park and close the STP.
6. DEQ, Woodbridge, ESS, and PWCSA representatives met on April 14, 2006 to discuss these compliance issues and the preferred option of connecting to the PWCSA and taking the existing STP offline. The position taken by the PWCSA is that it is willing to take Woodbridge's STP flows, however, in terms of cost, the mobile homes will be treated as single family homes and the roads and collection system would need major upgrades to comply with PWSCA's standards. PWSCA estimated that it would cost approximately \$850,000 just for the "tap fees" to the mobile home park.
7. Woodbridge asserts that with PWSCA's conditions the connector project is not financially feasible. Woodbridge explored state, federal, and county grants and loans for low income housing to lessen the financial burden but to date has been unable to secure appropriate funding for the connector project.
8. Since the funding issues for the connector project cannot be resolved, Woodbridge has agreed to build a new STP and take the existing STP offline to ensure consistent Permit compliance and ensure the long-term viability of the mobile home park. Woodbridge has signed a contract with an engineering firm, WW Associates, to design and construct the new STP. To offset the cost of construction Woodbridge intends to expand the mobile home park from 98 to 131 units.
9. In the meantime, to manage higher flows that result from heavy rain events at the existing STP during the construction period ESS has developed an interim storm water mode for STP operations. When higher amounts of influent are anticipated the aeration tanks will be pumped down and a portion of the influent will be bypassed to an old polishing pond. After the storm event influent will either be pumped from the polishing pond to the headworks for

preliminary treatment or pumped and hauled to a nearby wastewater treatment facility. The bypass procedure will be included in the Operations and Maintenance (O&M) Manual for the STP. This procedure will remain in effect until the construction of the new STP necessitates taking the polishing pond off line. At that time, ESS will make every effort to contact a local pump and haul company to reduce the wastewater volume in the aeration basin prior to heavy rain events. This capacity buffer should allow the STP to more effectively handle short-term flow increases. If needed, after the rain event Woodbridge will arrange to have seed sludge delivered to ensure adequate treatment efficiency.

10. Appendix A of this Order requires Woodbridge to complete construction of the new STP, take the existing STP offline and revise the Operations and Maintenance (O&M) to include the bypass procedures.

SECTION D: Agreement and Order

Accordingly, the State Water Control Board, by virtue of the authority granted it in Va. Code § 62.1-44.15(8a) and (8d), orders Woodbridge MHP, LLC, and Woodbridge MHP, LLC voluntarily agrees that it will:

1. Perform the actions described in Appendix A of this Order to remedy the violations described above and achieve compliance with the State Water Control Law and Regulations and the Permit requirements.
2. Pay a civil charge of \$5,500 within 30 days of the effective date of the Order in the settlement of the violations cited in this Order. Payment shall be made by check payable to the "Treasurer of Virginia", delivered to:

Receipts Control
Department of Environmental Quality
P.O. Box 1104
Richmond, VA 23218

Either on a transmittal letter or as a notation on the check, Woodbridge MHP, LLC shall indicate that this payment is submitted pursuant to this Order and shall include the Federal Identification Number for Woodbridge MHP, LLC.

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend the Order with the consent of Woodbridge MHP, LLC, for good cause shown by Woodbridge MHP, LLC, or on its own motion after notice and opportunity to be heard.
2. This Order only addresses and resolves those violations specifically identified herein and listed above in Section C-2. This Order shall not preclude the

Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any subsequent or subsequently discovered violations; (2) seeking subsequent remediation of the facility as may be authorized by law; or (3) taking subsequent action to enforce the Order. This Order shall not preclude appropriate enforcement actions by other federal, state, or local regulatory authorities for matters not addressed herein.

3. For purposes of this Order and subsequent actions with respect to this Order, Woodbridge MHP, LLC admits the jurisdictional allegations, factual findings, and conclusions of law contained herein.
4. Woodbridge MHP, LLC consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.
5. Woodbridge MHP, LLC declares it has received fair and due process under the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, and the State Water Control Law, and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to enforce this Order.
6. Failure by Woodbridge MHP, LLC to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
8. Woodbridge MHP, LLC shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence which is beyond its control. Woodbridge MHP, LLC shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. Woodbridge MHP, LLC shall notify the DEQ Regional Director in writing when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order.

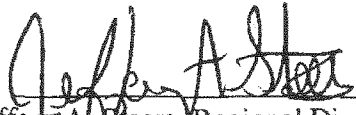
Such notice shall set forth:

- a. the reasons for the delay or noncompliance;
- b. the projected duration of any such delay or noncompliance;
- c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
- d. the timetable by which such measures will be implemented and the date full compliance will be achieved.


Failure to so notify the Regional Director within twenty-four (24) hours of learning of any condition above, which Woodbridge MHP, LLC intends to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.
10. Any plans, reports, schedules, permits, or specification attached hereto or submitted by Woodbridge MHP, LLC and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.
11. This Order shall become effective upon execution by both the Director or his designee and Woodbridge MHP, LLC. Notwithstanding the foregoing, Woodbridge MHP, LLC agrees to be bound by any compliance date, which precedes the effective date of this Order.
12. This Order shall continue in effect until the Director or Board terminates the Order in his or its sole discretion upon 30 days written notice to Woodbridge MHP, LLC. Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve Woodbridge MHP, LLC from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.
13. By its signature below, Woodbridge MHP, LLC voluntarily agrees to the issuance of this Order.

And it is so ORDERED this day of December 18, 2006.


Jeffrey A. Steers, Regional Director
Department of Environmental Quality
Northern Virginia Regional Office

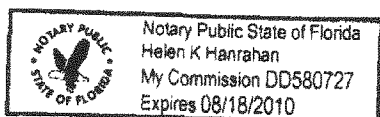
Woodbridge MHP, LLC voluntarily agrees to the issuance of this Order.

By: 
Bradley P. Dressler, Manager
Woodbridge MHP, LLC

Date: 10/16/06

State of Florida
~~Commonwealth of Virginia~~
City/County of Martin

The foregoing document was signed and acknowledged before me this 16 day of
October, 2006, by Bradley P. Dressler, who is Manager of Woodbridge MHP,
LLC, on behalf of Woodbridge MHP, LLC.




Notary Public

My commission expires: August 18, 2010

APPENDIX A SCHEDULE OF COMPLIANCE

Woodbridge MHP, LLC shall:

1. By no later than November 30, 2006, submit to DEQ a revised O&M Manual, for review and approval, which details the bypass procedures to use at the STP when heavy rain events are likely to occur.
2. By no later than December 15, 2006, submit to DEQ a Preliminary Engineering Report (PER), for review and approval, for design and construction of the new STP. Woodbridge shall expeditiously respond to any comments on the PER and shall respond within thirty (30) days of receipt of written comments.
3. By no later than June 1, 2007, submit plans and specifications to DEQ, for review and approval, for the design and construction of the new STP. Woodbridge shall expeditiously address any comments from DEQ and shall respond to any comments from DEQ within 30 days of receipt of written comments.
4. Beginning September 30, 2007, submit quarterly construction progress reports to DEQ with the Discharge Monitoring Report ("DMR") submission until all items of the schedule of compliance are complete.
5. By no later than September 30, 2008, submit to DEQ, for review and approval, a closure plan for the existing STP. Woodbridge shall expeditiously address any comments from DEQ and shall respond to any comments from DEQ within 30 days of receipt of written comments.
6. By no later than September 30, 2008, complete construction of the new STP in accordance with the approved plans and specifications and obtain a Certificate to Operate (CTO).
7. By no later than January 1, 2009, achieve compliance with all Permit limits.
8. By no later than March 1, 2009, close the old STP in accordance with the approved closure plan and submit a closure report to DEQ.
9. Woodbridge acknowledges that during the period of construction it may experience additional exceedences of the same Permit conditions which necessitated the installation of the new STP. Accordingly, pending completion of the construction, Woodbridge shall continue to operate the STP in accordance with the Operations and Maintenance (O&M) manual and the Sludge Management Plan (SMP) in order to ensure that the STP produces the best quality effluent of which it is capable, and in order to minimize any additional

exceedences of Permit effluent limits and impacts to water quality that may occur while the new STP is under construction.

**State "Transmittal Checklist" to Assist in Targeting
Municipal and Industrial Individual NPDES Draft Permits for Review**

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name:	Woodbridge Mobile Home Park STP
NPDES Permit Number:	VA0027855
Permit Writer Name:	Douglas Frasier
Date:	5 October 2012

Major ☐

Minor ☒

Industrial ☐

Municipal ☒

I.A. Draft Permit Package Submittal Includes:

	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?	X		
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?		X	
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?	X		
8. Whole Effluent Toxicity Test summary and analysis?			X
9. Permit Rating Sheet for new or modified industrial facilities?			X

I.B. Permit/Facility Characteristics

	Yes	No	N/A
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet or permit contain a description of the wastewater treatment process?	X		
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet or permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water?		X	
a. Has a TMDL been developed and approved by EPA for the impaired water?			X
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?			X
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?			X
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	
10. Does the permit authorize discharges of storm water?		X	

I.B. Permit/Facility Characteristics – cont.

	Yes	No	N/A
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?	X		
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?	X		
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?	X		
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?	X		
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?	X		

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Checklist – for POTWs (To be completed and included in the record only for POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether “antibacksliding” provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X

II.C. Technology-Based Effluent Limits (POTWs)	Yes	No	N/A
1. Does the permit contain numeric limits for <u>ALL</u> of the following: BOD (or alternative, e.g., CBOD, COD, TOC), TSS, and pH?	X		
2. Does the permit require at least 85% removal for BOD (or BOD alternative) and TSS (or 65% for equivalent to secondary) consistent with 40 CFR Part 133?	X		
a. If no, does the record indicate that application of WQBELs, or some other means, results in more stringent requirements than 85% removal or that an exception consistent with 40 CFR 133.103 has been approved?			X
3. Are technology-based permit limits expressed in the appropriate units of measure (e.g., concentration, mass, SU)?	X		
4. Are permit limits for BOD and TSS expressed in terms of both long term (e.g., average monthly) and short term (e.g., average weekly) limits?	X		
5. Are any concentration limitations in the permit less stringent than the secondary treatment requirements (30 mg/l BOD5 and TSS for a 30-day average and 45 mg/l BOD5 and TSS for a 7-day average)?		X	
a. If yes, does the record provide a justification (e.g., waste stabilization pond, trickling filter, etc.) for the alternate limitations?			X

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the fact sheet indicate that any WQBELs were derived from a completed and EPA approved TMDL?			X
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a “reasonable potential” evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the “reasonable potential” evaluation was performed in accordance with the State’s approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?	X		
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have “reasonable potential”?	X		
d. Does the fact sheet indicate that the “reasonable potential” and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations)?		X	
e. Does the permit contain numeric effluent limits for all pollutants for which “reasonable potential” was determined?	X		

II.D. Water Quality-Based Effluent Limits – cont.	Yes	No	N/A
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term AND short-term effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the record indicate that an “antidegradation” review was performed in accordance with the State’s approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters and other monitoring as required by State and Federal regulations?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?		X	
3. Does the permit require at least annual influent monitoring for BOD (or BOD alternative) and TSS to assess compliance with applicable percent removal requirements?		X	
4. Does the permit require testing for Whole Effluent Toxicity?		X	


II.F. Special Conditions	Yes	No	N/A
1. Does the permit include appropriate biosolids use/disposal requirements?			X
2. Does the permit include appropriate storm water program requirements?			X

II.F. Special Conditions – cont.	Yes	No	N/A
3. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			X
4. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?			X
5. Does the permit allow/authorize discharge of sanitary sewage from points other than the POTW outfall(s) or CSO outfalls [i.e., Sanitary Sewer Overflows (SSOs) or treatment plant bypasses]?		X	
6. Does the permit authorize discharges from Combined Sewer Overflows (CSOs)?		X	
a. Does the permit require implementation of the “Nine Minimum Controls”?			X
b. Does the permit require development and implementation of a “Long Term Control Plan”?			X
c. Does the permit require monitoring and reporting for CSO events?			X
7. Does the permit include appropriate Pretreatment Program requirements?			X

II.G. Standard Conditions	Yes	No	N/A
1. Does the permit contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		
List of Standard Conditions – 40 CFR 122.41			
Duty to comply	Property rights	Reporting Requirements	
Duty to reapply	Duty to provide information	Planned change	
Need to halt or reduce activity	Inspections and entry	Anticipated noncompliance	
not a defense	Monitoring and records	Transfers	
Duty to mitigate	Signatory requirement	Monitoring reports	
Proper O & M	Bypass	Compliance schedules	
Permit actions	Upset	24-Hour reporting	
		Other non-compliance	
2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for POTWs regarding notification of new introduction of pollutants and new industrial users [40 CFR 122.42(b)]?	X		

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	<u>Douglas Frasier</u>
Title	<u>VPDES Permit Writer, Senior II</u>
Signature	<u></u>
Date	<u>5 October 2012</u>